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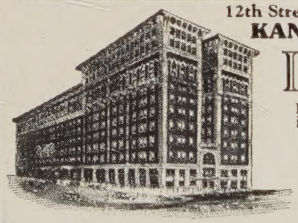

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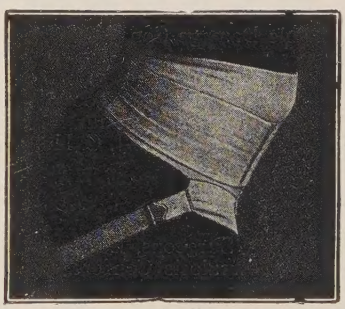

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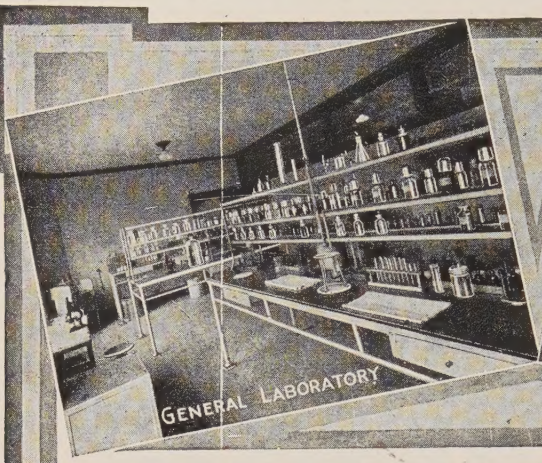

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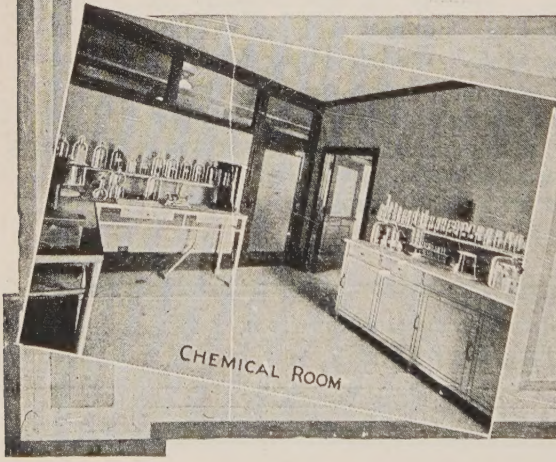

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		5	7½	10	12½	15	Calculation
BENETOL	1:200	—	—	—	—	—	
	1-250	+	—	—	—	—	200+300+350
	1:300	+	+	+	—	—	80 90 100=3 11
	1:350	+	+	+	+	—	3
	1:400	+	+	+	+	+	
Dakin's Solution	1:5	—	—	—	—	—	
Chlorine 4.20	1:10	+	—	—	—	—	5 + 10 +15
	1:15	+	+	+	—	—	80 90 100=0.10
	1:20	+	+	+	+	+	3
	1:25	+	+	+	+	+	
Phenol	1:80	—	—	—	—	—	
	1:90	+	—	—	—	—	
	1:100	+	+	+	—	—	
	1:110	+	+	+	+	+	

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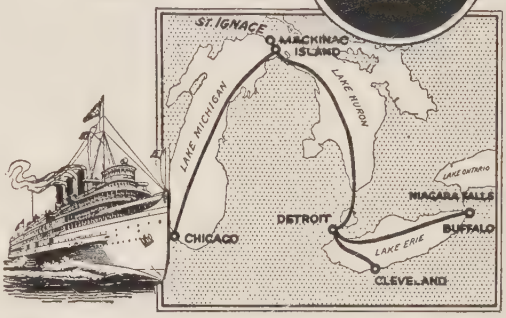

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CAVENDISH CHEMICAL CORPORATION 88 Park Place, NEW YORK

The
Chicago Medical Recorder
Official Journal
of
The American Association for the Study of Goiter

Vol. XLVIII MAY, 1926 No. 5

ORIGINAL ARTICLES

The Inevitable Damage Consequent Upon Goiter

Frederick A. Coller, M.D., From the Department of Surgery, University of Michigan.

Perhaps no disease has excited as much interest in the medical profession during the past few years as has goiter, largely because of the brilliant advances made in our knowledge of it and because of a more proper appreciation of its frequency. The public especially in goiterous districts has also begun to exhibit an interest stimulated by the prophylactic measures now coming into practice and the diffusion of knowledge necessary to the installation of such measures. Since the recent advances in our knowledge of goiter have been largely in the fields of prophylaxis and in the mechanism and measurement of abnormal activity of goiter, our attention is likely to be focused upon these phases of the subject, to the neglect of certain other aspects of the problem. The fact that goiter may be prevented by the institution of certain measures should not lead us to minimize the dangers of goiter to those who have them and we must not wait for the classical symptoms of hyperthyroidism to appear before instituting treatment. I wish to emphasize the fact that all goiters have potentialities for harm and will in time actually produce serious pathology in a large percentage of goiterous individuals, and I wish to present a few of the high lights on certain of the more manifest evidences of the damage produced by goiter with a rough estimation of its frequency.

The clinical classification of goiter is still unfortunately not at all uniform and is usually made unnecessarily complex by combining abnormal functional variations with different pathological pictures and regarding them as entities while they are simply variations in stage of like processes.

Plummer's (1) classification is simple and workable clinically and is now generally used. According to this there are three histologic variations from the normal thyroid structure: (1) hypertrophy and hyperplasia of the alveolar epithelium; (2) marked increase of the intra-alveolar colloid, and (3) the development of new alveoli. According to the dominant type of variation a goiter may be hyperplastic, colloid or adenomatous recognizing that any of all forms may be

present in any gland. Three variations in function exist: (1) pure hyperthyroidism; (2) pure hypothyroidism and (3) exophthalmic goiter.

The type of goiter endemic in certain areas is a combination of the colloid and adenomatous elements consequently their problems are allied. Exophthalmic goiter apparently has no peculiar geographic distribution and whatever its etiology may be it does not seem to be closely related etiologically to the endemic form. Its manifestations are dramatic, its prodromal stage short, the need of urgent treatment recognized and its morbidity and dangers are well known, consequently, I will exclude this disease as far as possible from this discussion.

The goiter endemic in many large geographic areas is usually first noted at or before puberty when it may show mild hyperplastic changes which in time give place to the colloid form. The iodine deficiency present probably intimates the difference between the ordinary hyperplasia of puberty and the goiter of puberty. This stimulus to goiter formation which has caused the colloid enlargement of the gland at the same time initiates the development of the adenomata which during this period are not usually evident and which may represent a compensatory effort on the part of the thyroid. The origin of the adenomata is not definitely known, but that the stimulus is the same as that producing colloid goiter seems fairly evident. Wölfler's theory that they arise from foetal rests in the interalveolar parenchyma is disputed as Aschoff (2) and others who believe they arise in the ordinary thyroid tissue. Aschoff maintains their origin to be always from centerally situated alveoli and believes that they are definite tumor formations capable of hypofunction, hyperfunction or dysfunction and therefore not controlled by the usual powers governing growth and function. As they grow there usually develops a more or less distinct capsule and the older central part of the tumor undergoes destructive processes while growth proceeds at the periphery. Two main forms of development occur; one with large amounts of colloid in the adenoma, the adenomatous colloid goiter; the other with a dense appearance in which the alveoli of a foetal form are imbedded in a myxomatous stroma, the foetal adenoma. Both forms undergo involutional processes and are the seat of degenerations of many types, haemorrhagic, fibrous, cystic or calcareous and all types may be present in any one goiter. These degenerations when present do not represent a new type, but are all variations of the adenomata goiter.

The colloid goiter of puberty gradually recedes as the rate of growth is slowed and by the time the twenty-fifth year is reached the colloid has usually disappeared. Hyperthyroidism associated with the colloid goiter in the adolescent stage may occur, but is rare; mild hypothyroidism, however, is not uncommon in colloid goiter at this time. A goiter once overloaded with colloid seldom returns to a normal state and some colloid tends to persist and the colloid goiter itself may persist even to old age with the development of adenomata and does so in a comparatively small number of cases.

The adenomata characterized by their nodular feel may be evident during the period of growth through puberty and adolescence, but usually are not common until the later half of the time. They have increased in size and in their ratio to the colloid which is diminishing and have thus become evident. Their growth after the age of twenty-five years has become well established and from this time on they dominate the goiter picture. The great majority of all endemic goiters contain adenomata and their history beyond

twenty-five years is that of the adenomata. The degenerations mentioned are constantly taking place causing variation in clinical aspects of the goiter. During the latter part of the third decade a small number of them begin to hyperfunction and hyperthyroidism appears. Henceforth hyperthyroidism may appear at any time and usually does appear in varying degrees of severity at some time. The occurrence of hyperthyroidism seems dependent on certain factors, the most important of which is time. Other factors of importance are infection, excessive use of iodine, pregnancies and the menopause. Plummer (3) has shown that the average time of the onset of marked hyperthyroid symptoms is seventeen years after the goiter is first noticed and the studies of Boothby (4) which my own studies confirm have shown that a person with an adenomatous goiter may have hyperthyroidism in the late twenties and with each year there after have an increasing and definite chance of developing this complication. No accurate determination can be made of the percentage of individuals with adenomatous goiter who develop hyperthyroidism as the only figures available are those on hospital patients, but in this group it is high. Boothby's figures show a per cent increasing from 8 per cent in the third decade to 32 per cent in the sixth decade and my own cases show 11 per cent in the third decade increasing to 32 per cent in the fifth decade. Thus in the adenomatous goiters of the fifth and sixth decades alone nearly a third of hospital cases present measurable hyperthyroidism and no one can prophesy at the age of twenty-five which goiter will in the course of time present this disabling manifestation, but the chances are high that the time element alone will bring it about. That the adenomata are responsible for the production of this condition seems clear since their removal promptly causes a return of the basal metabolic rate to the normal. Other evidence of this relationship might be cited.

Aside from the production of hyperthyroidism which is in no wise dependent on the size of the goiter, pressure symptoms due to its size and anatomical position may incapacitate or even cause death. While we do not know what proportion of goiters cause these manifestations it probably is an appreciable number. I find evidence of tracheal compression of some degree in 26 per cent of my patients with endemic goiter.

Goiter and Cardiovascular Damage

That the cardiovascular system is the chief system attacked in endemic goiter has been clearly pointed out, but the importance of the cardiac damage has not been sufficiently emphasized or appreciated. The types of injury have been studied, but their frequency should be insisted upon. The relation between the heart and goiter was noted in the earliest observations on the disease and this relationship has been insisted upon in a voluminous literature. The mechanism of its production has been controversial between the advocates of a mechanical and those of a toxic etiology. Without a discussion of these theories it can be safely said that the mechanical theory is practically given up while the toxic, or better, the thyrotoxic origin of the goiter heart is generally accepted. Any attempt to determine the gross amount of cardiac damage caused by endemic goiter is impossible because no large series of cases have been analyzed except in hospital groups and most studies have been made on groups of cases with hyperthyroidism including both adenoma and exophthalmic goiter. Plummer (5) pointed out that hypertension existed in patients with adenomatous goiters in marked frequency compared with other individuals of like age.

In the studies of the heart in cases of

hyperthyroidism varying statistics are given depending largely on what that observer considered a normal heart. Hamilton (6) found 90 per cent of normal hearts while Bigler (7) considered 90 per cent of his to be damaged. Kerr and Hensel (8) examined 181 cases of adenomas and exophthalmic goiter finding cardiac disturbance in about the same frequency in both conditions with cardio-vascular symptoms more or less marked in 44 per cent of the cases with hyperthyroidism. Dameshek (9) in a review of the hearts of 141 cases with hyperthyroidism found 28.5 per cent to have definitely damaged hearts. It is only in recent years that exact studies have been made of the cardiac irregularities and striking evidence of the extent of myocardial damage has been shown. Willius (10) estimates that 9 per cent of exophthalmic goiter and 70 per cent of adenomatous goiters with hyperthyroidism exhibit auricular fibrillation. Kerr and Hensel (8) in 58 cases found 34 per cent with this same type of irregularity. Dameshek (9) in his excellent summary of this subject states that it can be safely said that 25 per cent of cardiac damage in hyperthyroidism would probably represent the average figure.

We can concede that in the endemic goiter with hyperthyroidism the cardiovascular damage is present in a large percentage of the individuals and usually dominates the clinical picture. But certain of the patients with adenomata with a normal basal metabolic rate at the time of examination are found to have definite pathologic symptoms that must be ascribed to the presence of their goiter. In an analysis of such a group of adenomatous goiters with normal basal metabolic rates, I (11) found that with each decade of life these patients showed definite cardiac damage greater than that present in other groups of individuals of like age without goiter. The incidence of the damage was progressive, in the fifth decade 4 per cent showed auricular fibrillation and in the sixth decade 30 per cent presented this cardiac irregularity. A pulse rate of 80 or below was found in 46 per cent of the cases in the third decade and in the sixth decade only 20 per cent had a similar rate. Cardiac hypertrophy was present in 18 per cent of the cases in the third decade and in 50 per cent of those in the sixth decade. The cause of this is not clear, but is probably caused by the long standing low-grade thyrotoxic agent which has not yet been marked enough to cause the typical clinical picture of hyperthyroidism, yet has caused this amount of cardiac damage. It is possible that measurable degrees of hyperthyroidism have existed in the past, but that damage may exist without this seems likely. When we consider this amount of cardiovascular damage present in the endemic goiter with and without hyperthyroidism it will allow us to prophesy that an adenomatous goiter will eventually lead in the majority of these cases to cardiac pathology of a high grade of severity. Large numbers of cases present themselves to the hospital for treatment of heart disease and greater attention should be paid to this agent in the production of heart disease which certainly places it in goiterous districts on a par at least with syphilis and rheumatic fever as an etiological factor.

Goiter and Malignancy

The occurrence of malignancy in the thyroid gland has been regarded as one of great rarity and this is well borne out by the meagre data available from necropsy records. Wilson (12) in a study of this problem found the incidence in the United States to vary from 1 to 211 in San Francisco to 1 in 2,546 in the upper Mississippi Valley. But this is not the point that should interest us in a study of the morbidity of goiter. Crotti (13) states that 90 per cent of all malignancy of the thy-

roid has its origin in goiter and other pathologists agree that most of the malignant tumors do arise from goiter. The use of the term goiter here is misleading as most clinics group the endemic and exophthalmic goiter under the caption goiter. Herbst (14) states that Wilson in the Mayo Clinic has not found malignancy arising from the hyperplastic gland of exophthalmic goiter and this origin for malignancy must be considered negligible. He considers that the vast majority of carcinoma arises from the adenoma. In determining the frequency of thyroid malignancy we must consider its frequency not in the total population nor in goiter, but in endemic goiter. Undoubtedly cases do arise in the thyroid not the seat of goiter, but they are in the minority. Statistics as to its frequency in endemic goiter are not conclusive. Kocher (15) reports 235 cases in his own series on which complete data was available and 76 on which the data was incomplete in a total of 3,500 cases of goiter. He believed he had seen at least 100 other cases of malignancy in consultation on whom no records were available. If we count only the 311 cases occurring in his clinic we find about 9 per cent of malignancy in this series of goiters. Wilson (ibid) finds 290 cases in an experience with 10,680 endemic goiters and 5,867 exophthalmic goiters, the incidence of malignancy in relation to the endemic goiter group being 2.7 per cent. Warthin (16) states that he has found 55 malignant tumors of the thyroid in about 1.260 goiters of all types examined by him and he regards the malignant degeneration of the adenomata as by far the commonest variety of the malignancies. We have here an occurrence of malignancy in 4.4 per cent of all types of goiters which would make a much higher incidence than this if we exclude the exophthalmic goiter. Pauchet (17) states that "cancers of the thyroid develop on old goiters and never occur in the normal thyroid. The goiter constitutes the precancerous lesion as does a leucoplakia, an adenoma of the breast, a neuvus or an ulcer of the stomach. Fibrous and exophthalmic goiter become malignant only rarely, nodular goiter often becomes malignant." In Wilson's 290 patients with malignancies only 61 had not developed a goiter previous to one year before the diagnosis of malignancy was made. Ehrhardt (18) in 200 collected cases of malignancy of the thyroid obtained a history of a previous goiter in 104 or 52 per cent of them. Müller and Speese (19) collected 42 cases with a history of previous goiter in 25 or 59 per cent. Berry (20) remarks that even in cases in which there is no history of preexisting goiter it will often be found upon examination after removal that the tumor contains cysts, points of calcification or similar evidence of former disease.

It does not seem remarkable that malignancy may occur in goiters not noticed by the patient as we see so frequently hyperthyroidism appearing in elderly women who deny that a goiter is present and in whom, nevertheless, small adenomata may be demonstrated. The rate of growth of a malignant thyroid may be very slow and exist for a considerable period of time without any symptomatic evidence presenting itself. As a consequence of these conditions we must admit that all statistics on the goiter as a precancerous lesion must be highly inaccurate, but as likely to be too low as too high. The evidence we have found, however, does indicate that the principal point of origin of malignant disease of the thyroid is the adenomatous goiter and that this is regarded by pathologists as a definite precancerous lesion. Its frequency in goiters of this type is probably conservatively stated as being in the neighborbood of 3 per cent. It occurs in adenomatous goi-

ters of patients in the cancer age by which time the adenomata, these benign new growths, are the seat of involutional changes which are conditions entirely favorable for malignant disease to flourish. An incidence of cancer of 3 per cent in endemic goiter must lead us to regard it as a precancerous lesion well worthy of our attention. It is notorious that malignancy of the thyroid is difficult or often impossible of diagnosis until it has invaded surrounding structures, a point at which operative or other treatment is usually helpless, consequently, our hope of cure must lie in removal of the adenomatous goiter at a time prior to the expectancy of malignant degeneration.

Mental and Nervous Changes Associated with Goiter

It is well known that the thyroid gland is intimately associated with certain basic mental phenomena and that hyper, hypo and dysfunction of this gland are productive of abnormal mental and nervous conditions most of them of an immeasurable kind. We have observed in certain of our cases the presence of pschoses attributed by the examining psychiatrist to the toxic action of the abnormal thyroid secretion. Six per cent of our cases of adenoma with hyperthyroidism have shown these thyrotoxic psychoses and two per cent of our cases with adenoma with a normal metabolic rate have shown similar findings. The relation of these abnormal mental states to the goiter was made clear by the return to a more normal state following removal of the goiter. An attempt to estimate the total mental morbidity produced by goiter is clearly beyond the scope of this discussion, but that is large if one considers all of its phases seems clear. An examination of the literature bearing on this point brings out two angles of the subject that have been studied by those interested in the problem, first an attempt to show a relation between goiter and the true types of insanity and secondly studies of the psychoneurotic syndrome of hyperthyroidism. The mental changes of hypothyroidism are well known and need not be entered upon.

Goiter as an etiological factor in the production of insanity is not regarded seriously by the majority of present-day psychiatrists, but certain of the French alienists regard it as a possibility. Marzocchi and Antonini (21) in 1893 came to the following conclusions: "The goiterous including congenital cases are eight times more susceptible to insanity than those not afflicted with thyroid enlargement, moreover if one deducts all congenital cases the goiterous more often become insane than other people." Almadi (22) in 1898 remarked on the great frequency of thyroid lesions in aliens; Latarget (23) in 1904 showed the frequency of goiterous manifestations in maniacs and proposed thyroidectomy for their amelioration. Biron (24) in 1904 insisted on the frequent association of goiter with melancholy. Parhon (25) in 1910 ascribes various types of insanity to the presence of goiter and advised operation on the goiter for relief of insanity with report of some favorable results. Phillips (26) in 1919 discusses the high incidence of goiter in three asylums and demonstrates a much higher goiter incidence in the occupants of asylums than in the population from which the inmates were drawn. Laignel-Lavastine (27) in 1922 discusses the relation between abnormalities of thyroid and manic depressive insanity and believe that goiter plays a part in the production of this type of insanity.

Eastman (28) in 1922 records some interesting attempts to treat dementia praecox associated with goiter by removal of the goiter, without, however, producing any marked improvement and Berkley and Follis (29) have reported the results of treating catatonia by thyroidectomy

again without definite favorable changes resulting. Ramadier and Marchand (30) in studies of thyroid of insane patients in a goiter district did not find greater instance of microscopic change in the insane than in those of the sane. As far as one can judge from the evidences and the thought of most psychiatrists the relation of goiter to insanity is at most a distant one, but that in individuals with a psychopathic tendency it may be the exciting cause but not the fundamental one.

On the other hand since the earliest description of Graves' disease it has been known that there is a constant association of it with abnormal nervous and mental phenomena. The abnormal mentality of both hypo and hyperthyroid states is generally recognized. Studies of the mentality of exophthalmic goiter have been made and its frequent association with psychosis of a toxic type admitted although there is some doubt as to whether the dysthyroidism is the exciting or original cause it being possible that this disease appears only in those with psychopathic tendencies. No statistical studies could be found as to the frequency of abnormal mental states associated with endemic goiter. That psychoses are not uncommonly associated with the adenomatous goiter in a phase of hyperthyroidism seems clear from our own experience. Other abnormalities may exist when these cases are carefully studied by psychiatrists. Woodbury (31) in a study of the psycho-neurotic syndrome of hyperthyroidism draws a distinction between that due to exophthalmic goiter and that of adenomatous goiter. He concludes in part that thyrotoxic psychosis does not merit a separate classification, but that a very definite mental and nervous picture differing in degree and type according to the acuteness and type of dysthyroidism does exist. He also states that in the adenomatous goiter with mild hyperthyroidism depression is far more common and of longer duration than in the exophthalmic type and he regards the depression without delusions as peculiar to this type of goiter. He finds 17 per cent with well marked apprehension and 7 per cent with depression and 6 per cent of the cases exhibited types of insanity with the thyrotoxicity as the exciting factor rather than its fundamental cause.

Minor changes in mental capacity, disposition and reactions are noted by everyone in contact with cases with hyperthyroidism all of them impossible of tabulation, but of definite interest to the patient. Thus no true idea of even the approximate amount of mental and nervous abnormalities caused by endemic goiter can be reached. That these manifestations are usually present with hyperthyroidism is evident and that permanent and definite psychoses appear in goiterous patients only in individuals with a psychopathic constitution in whom the thyroid abnormality is the exciting cause is fairly well established. But these mental changes transient or permanent certainly can be regarded as abnormal, incapacitating and due to the presence of the goiter and are frequent enough so that they add greatly to the total morbidity of endemic goiter.

Treatment

That endemic goiter can be prevented in a large number of cases by supplying the necessary amount of iodine to overcome the deficiency of this substance is now well established. It is also undoubtedly true that iodine in proper doses will reduce and perhaps cure many endemic goiters in the early stages when they consist largely of colloid. After the adenoma is well established and grossly in evidence, after the degenerations have begun to take place, medication is rarely successful in causing its disappearance. After the patient has reached the age of twenty-five iodine therapy has little per-

manent effect in eradicating the adenomatous elements in the goiter and injudicious use of iodine may precipitate a hyperthyroid reaction. The longer the adenoma are present the greater the chance there is of the appearance of disabling pathological and clinical conditions so that one can foretell with certainty that an individual with an adenomatous goiter at twenty-five will in all probability at forty-five have demonstrable lesions of the heart, thyroid and mind. The onset of these complications is usually insidious and the full blown lesion is ordinarily the first thing that brings the patient for treatment. There can be no field for radio therapy in the early treatment of the adenoma without symptoms, whatever may be said about its effect on the stage of hyperthyroidism. Any prophylactic treatment would have to extend over a long series of years and no evidence has been advanced that the adenoma can be destroyed by any selective action of the rays. The surgical removal of the adenomatous goiter at a stage before the onset of symptoms is safe and accurate, if one waits for the development of the sequelae a mortality begins to appear. Before twenty-five operation is usually not indicated except for gross pressure symptoms and it seems wise to give the goiter a chance to stabilize up to this period, assisting it by medication. The rare appearance of complications and the likelihood of recurrence in adolescence makes surgery inadvisable and no harm can be apprehended by waiting. Removal of endemic goiter after twenty-five has a high prophylactic value and should be urged on the patient as soon as a definite diagnosis is established.

Summary

1. Endemic goiter is composed of colloid and adenomatous elements. In early life the colloid element predominates, after twenty-five the adenoma predominate. These changes are progressive and constant in time, the length of which is well established, will cause the appearance of symptoms.

2. Frank hyperthyroidism caused by endemic goiter will be found to increase in frequency from the latter part of the third decade to the fifth and sixth decades when at least a third of the cases will have it.

3. Definite cardiovascular damage will appear in at least a quarter of those with hyperthyroidism and in a smaller but appreciable number of those with normal metabolic rates.

4. Endemic goiter is a precancerous lesion with an incidence of malignancy of at least three per cent.

5. Endemic goiter causes many mental changes of a minor, but disabling nature and in those with a psychopathic inheritance may excite the appearance of some mental abnormalities.

6. The progressive nature of the goiter pathology and the appearance of symptoms enables us to attack the goiter at a time when medication has ceased to be effective and when the changes begin to menace the health of the patient. The surgical removal of the adenomatous goiter at this time will prevent the appearance of the great morbidity otherwise to be expected.

7. The removal of adenomatous goiters should be advised on diagnosis in individuals after the age of twenty-five.

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Some Insects and Their Relation to Man*

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From the beginning of history to the present time man has been a prey to insects and consequently a sufferer from diseases which they are capable of transmitting. It is impossible to estimate the effect which this insect activity has had upon the human race.

If one were asked to name the safety device which has come into common use during the last half century which has saved the greatest number of lives and prevented the greatest amount of illness which could not otherwise have been prevented, one would be quite safe in designating the ordinary fly and insect screening. It is quite probable that most of us do not realize many of the advances we have made in controlling the spread of insects because we are very prone to accept new comforts and forget former hardships as well as the lessons connected with them. We do not commonly think of the important part which insects have played in history, how they have overthrown dynasties and even wiped out whole countries or civilizations or reduced them from a position of commanding superiority to one of helpless subordination. They have defeated victorious armies on the way to conquer the world and at times have allied themselves with the defeated who were thus able to turn inglorious defeat into substantial victory. It is only in the last forty years that we have begun to comprehend and thereby raise ourselves to a plane superior to our insect and other

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untoward surroundings, and the fly-screens, the insecticides, the disinfectants and the appurtenances thereto are the symbols of our long deferred superiority and victory.

Five hundred years before Christ, or about the time of Pericles, Greece was the center of power and of culture and intelligence. It was only a few years later that the anopheles mosquitoes of the country became in some manner infected with malaria, called by Hippocrates "the burning disease," and the country began immediately to decline and never again was a predominant factor in the history of the world. The disease became general and was sufficient to produce a physical and mental deterioration in one of the strongest and most virile nations the world has produced. Today malaria is one of the great problems in Greece and when this condition is overcome there should be an improvement in their mental and physical condition though some time and doubtless some new blood will be required to overcome the results of two thousand years of malarialization.

Mesopotamia up to 500 B. C., had a relatively high degree of civilization but became weakened by the constant fight against malaria so as to become what might be termed a "low vitality" nation. It thus became invaded and captured by enemies from the higher lands who in turn suffered the same fate.

Egypt also a "low vitality" nation had developed a high type of civilization and culture but fell a prey to malaria, typhus, bubonic plague and other insect transmitted diseases. Following this decadence, it endured a regular succession of conquerors, each in his turn succumbing to the same insect borne diseases which had overcome his predecessor.

As with the preceding countries, Macedonia had built up a civilization of its own but fell in the same manner and at the present time is still in the grip of this curse of anopheles mosquitoes which make civilized life and proper mental and physical development impossible. During the War, there were about 750,000 allied soldiers in Macedonia and of this number about one-half were infected with malaria and any army with one-half its number on sick report has neither time nor ability to accomplish much else. It might also be said that any country so infected is hardly worth fighting over.

During the last few years we have begun to explore the numerous and extensive ruins which are the only remains of former civilizations once existing in the southern part of Mexico, Central America and Peru. The Mayans inhabited the country in and about Yucatan and at one time their main city Chichen Itza, was the largest city in this hemisphere. Malaria and yellow fever appeared and this strong country began to degenerate until it was no difficult matter for the Guatemalans to come down from the higher lands about one hundred miles away and capture the country. The Mayans left behind them traces of a civilization which showed advanced knowledge of astronomy, chronology, mathematics and architecture but unfortunately for them they never learned that the stegomyia mosquito is responsible for the transmission of yellow fever and the anopheles for malaria.

Following the decadence of Greece, Rome made itself the world power but along with other factors the insects soon made themselves manifest. The anopheles mosquitoes throughout Italy became infected with malaria possibly through travelers from Greece who had been infected there and carried the organisms in their blood. The disease soon became epidemic in the low lands and especially in the region in and around Rome. The traders and crusaders all carried their full quota

of insects and so in addition to malaria they had frequent epidemics of bubonic plague, typhus and relapsing fever with an assortment of contact and fly borne diseases and Rome was on the downward path. But as frequently happens the insects became not only their enemy but their ally as well. In 936 A. D., the Emperor Otto attacked Rome and while his initial military operations were successful yet his army soon became infected with a severe insect borne epidemic which destroyed his military preponderance. Henry IV of Germany captured Rome in 1081 and the insects then proceeded to put his army out of business. In 1137 A. D., Lothar invaded Italy but in a short time the malaria was too much for him and his army. In 1167 A. D., Frederick Barbarossa captured Rome after a decisive victory but his army became infected with both malaria and bubonic plague, caused by mosquitoes and fleas respectively. The Romans rallied and destroyed the sick and what was left of the well, and Frederick was fortunate in escaping with his life.

The armies of the crusaders probably fared worst of all from the insect borne epidemics, particularly in the first, the third and the seventh or last. It was not, however, the loss of life among the members of the crusades which was so important but the fact that as they traveled along the way and returned to their homes, those who did return, they distributed the infected insects they carried with them or, infected insects already there with the diseases they carried and as a result these epidemics became general through what was then the civilized world.

During the Thirty Years War as well as many others there was a far greater loss of life due to the transmission of disease through insects than that due to battle casualties.

In a similar manner to the countries already mentioned, may be explained the decadence of the civilizations once attained in Southern Arabia, Peru, Rhodesia, Ceylon, Java, Indo-China and India. In the Bible we find records of plagues, we find the same in Egyptian hieroglyphics, in the Assyrian and Phoenician records and in fact all history is full of such occurrences. The course of the world has been changed and altered, and changed again beyond our power to estimate by these vast plagues of disease and often a humble and despised insect has been the cause of the trouble.

It is not many years since the interior of Africa was an unknown wilderness. Within this country was an area in which the dreaded African sleeping sickness was present. The natives did not travel far from home. The Tsetse fly which transmits the disease did not move far from its habitat along the water's edge and only the wild animals which harbor the parasite moved to any extent. But along came civilization and trade channels were opened up and the natives began to move around with caravans, and the wild animals were disturbed and compelled to seek new ranges, and at the present time the infection has spread over at least one-fourth of the continent and thousands of miles have become depopulated. The percentage of fatal cases in this disease is very high if untreated or not treated early. At the present time it is dangerous to pass through the highly infected regions and a sufficiently prolonged residence generally results in infection. It is not possible to kill all of the Tsetse flies nor to destroy all of the wild and domestic animals which harbor the parasite. It is quite probable that the disease has been in the United States during the olden slave days but there was no Tsetse fly to transmit it to animals which serve to keep it going and serve to infect other flies,

which in turn infect human beings. It is to be hoped that this fly will never gain access to this continent.

I have read with great interest DeFoe's account of the great plague in London. I do not believe it is possible for us to conceive of the horrors these people underwent and therefore we are perhaps not properly appreciative of the blessings which have come to us as a result of the advances which have been made in the field of preventive medicine and sanitation. In my estimation this is the outstanding achievement of the century beside which other developments are not to be compared. These facts and procedures have not evolved themselves but are the results of the co-operation of bacteriologists, zoologists, hygienists, physicians, chemists, manufacturing chemists and others. Here in the United States and in certain parts of Europe, the principles of preventive medicine have become so well established that the measures to be employed are generally known and have become incorporated into the municipal and other laws. The procedures which we consider as obvious and a matter of course are entirely unknown over a considerable portion of the earth. There are languages and dialects which have in them no words corresponding to disinfectant, insecticide, antiseptic, etc.

It was a difficult matter to establish the proper sanitary measures in Cuba, Panama and the Philippines and secure their general observance. It has been a matter of years to train these peoples and even now they are prone to relax their care and ignore the fundamental rules which are instituted for their own good. It, therefore, requires constant watching and pressure upon our part to maintain hygienic conditions and prevent, so far as it is possible, the needless presence of easily preventable diseases.

Some years ago a small epidemic of cholera started in one of the Philippine villages. Word was sent out to establish a quarantine. When the health officers arrived the local health officer was requested to detail the measures which had been taken. He said he had established a quarantine and took them down to the bank of the river where he proudly showed them an American flag floating from a newly erected flagpole, which was his idea of a quarantine. He failed to grasp the idea of what was being attempted and that is the point of this tale.

The proof of the intelligence of a race is their ability to raise themselves above and protect themselves from adverse environment. The Nordics have shown themselves able to do this and were the first to gain a substantial victory in the continual fight against insects and this is, I believe, one of the important manifestations of their superiority. The average expectancy of male life in the United States is about 50.6 years and in Sweden is about 50.9 years. In India it is about 23 years and it would be less if the population were greater or the birth rate were higher. The combination of insects, ignorance and insanitation is the explanation. As an indication of what can be accomplished, the African Gold Coast annual death rate from 1881 to 1897 was 75.8 per thousand. In 1911 it had been reduced to 13.9 per thousand and the reduction was practically all in insect borne diseases.

It would be interesting if some students of history were to cite us to any instances of where the inhabitants of the tropics or lowlands had defeated those from the highlands or colder climates on anything like equal terms. Such instances would certainly be in the minority. We ordinarily think of mountaineers as hardy and vigorous people and the residents of the tropics as lacking in strength and stamina. Unquestionably there is a climatological reason for some degree of difference but

there is another and possibly more important element. The resident of the tropics who does not protect himself, is engaged in a constant conflict against insects and the parasites which they transmit and as a consequence his vitality becomes lowered or he becomes the victim of disease. Man can not continue for generation after generation upon a low plane of vitality without degeneration and decadence, physically, socially, mentally and morally. It has, however, been shown that under proper precautions, inhabitants of temperate regions may emigrate to the tropics and live there without manifest injury. This requires the avoidance of mosquitoes and other insects, the constant use of boiled water and many other precautions which at times are somewhat irksome. Those who comprehend their importance are less likely to ignore them.

Some of us may remember the days when yellow fever was the curse of the tropical and semi-tropical western hemisphere. Some of us may remember or have heard of the consternation which was caused at the times when it gained a foothold in the United States. When we entered into war with Spain and invaded Cuba this was the greatest obstacle with which we had to contend. The Medical Department realized that the first step in the control of the disease was to learn the method of transmission and accordingly work was begun under the direction of Drs. Reed, Carroll, Lazear and Agramonte. In order to test all the various theories of transmission, volunteers were called for from the soldiers and officers of the Medical Department who were not immune to the disease. Attempts were then made to inoculate them with the disease by all of these various means and eventually it was found that the stegomyia mosquito, which had bitten a yellow fever patient during the first three days of the disease, was capable of transmitting it after a period of twelve days had elapsed. I think you will agree with me that a considerable degree of courage was required by these volunteers and those who lost their lives are entitled to all the honor which can come to any soldier who has fallen on the field of battle. As a result of this work we now know how to prevent the spread of yellow fever and as a consequence it has almost disappeared. It is the plan of the Rockefeller Foundation to destroy all foci of yellow fever and wipe it from the face of the earth and it seems very probable they will succeed in their endeavor. During the last few years Professor Noguchi of the Rockefeller Institute has been studying yellow fever and has in fact isolated the germ which causes it but he has had some difficulty in securing a sufficient number of infected cases to work with.

The diseases which are transmitted by mosquitoes are malaria, yellow fever, filariasis and dengue fever. Malaria and yellow fever require no further mention. In filarial infection the mother organism locates itself in the lymphatic structures and gives birth to small motile organisms which occupy the blood channels by night and by day retreat to the liver or spleen. There may be no manifestations or there may develop a condition known as elephantiasis which is manifested by extreme enlargement more particularly in the lower extremities and may totally incapacitate the unfortunate victim. Dengue fever is also known as breakbone fever and is quite common in the Philippines and other portions of the tropics. It is not commonly fatal but is extremely painful and unpleasant to those who become infected.

The general rules to be followed with mosquitoes are as follows:

(a) Prevent so far as possible all mosquito propagation.

(b) Kill all mosquitoes possible of those which do breed.

(c) Keep habitations away from mosquitoes and mosquitoes away from habitations.

(d) Protect the sick from mosquitoes.

(e) Protect the well from mosquitoes.

It was the application of the above rules which made the building of the Panama Canal possible and life there as safe as in the temperate zones.

With us there is no question but that the common house fly is the most frequent transmitter of disease. There are also biting flies which are responsible for the spread of other diseases. Among the diseases which the domestic fly carries are typhoid fever, cholera, amebic dysentery, bacilliary dysentery, gangosa and oriental sore or Bagdad boil. In the first four diseases the fly transmits the infection by carrying organisms from the discharges of the sick to the food of the well. These diseases may be transmitted by other means but the fly is a common method. These four diseases are all death producing and have been the cause of countless deaths. The latter two diseases are relatively unimportant and are only found in a few places in the tropics.

Obviously it is desirable to accomplish the same ends with flies as with the mosquitoes though different methods are necessary. With the partial disappearance of the horse from crowded communities, the problem of the fly has become less difficult. Screens are of course a necessity to prevent their access to the sick and the well and to food supplies. All infected discharges from the sick should be sterilized before being disposed of. Fly swatters, fly paper, fly poison and traps all have their places.

It may be a matter of interest to know that there are relatively few flies in the Philippines and the reason is that a variety of ants of which there are countless numbers, prefer the fly larvae as food and in that manner are of great assistance to the sanitarians and the general health of the islands.

There are a number of cousins of the domestic fly which cause harm and the following diseases are transmitted by them: yaws or framboesia, filariasis, Tuleremia or deerfly fever, cutaneous tropical myiasis and African sleeping sickness. Yaws is widespread throughout the troppics. It is manifested by sores over the body. It causes much invalidism but rarely ends in death. The type of filaria transmitted by the fly is very similar to that transmitted by the mosquito. Tularaemia is a disease which is found in parts of Utah. It is accompanied with high fever and is carried by a horsefly. Certain biting flies deposit their eggs beneath the skin of man and when this happens the results may be exceedingly serious. The African sleeping sickness has already been mentioned and is the most serious of this list. Obviously these diseases are difficult of control because the flies responsible are not domestic and it is impossible to entirely control their spread and propagation. One cannot always stay behind screens, and headnets and gloves have their objections.

There are three kinds of fleas divided into those which live on the rat, those which live on the dog and those which live on man. They prefer their particular host but if compelled by hunger will go to another. Fleas transmit bubonic plague, and Leishmaniasis or dum-dum fever.

Bubonic plague might be described as a disease of rodents, more particularly the rat and squirrel which may be transmitted to man by means of the flea which serves as an intermediate host. It may be either an acute or a chronic disease in the rat, but when the latter dies, as it may with the acute type, the flea is compelled to seek another home. In the absence of

rats it may settle upon a man, which is unfortunate for the man. It is easily understandable why once this disease has started it is difficult to stop. A good description of an epidemic is to be found in 1 Samuel, 5th and 6th Chapters. The expiation required of the Philistines was that they return the Ark of the Covenant to the Israelites along with five golden emerods or images of the characteristic swellings of the disease and five golden mice (or rats) the basis of the disease. It is interesting to know that the reference was called to the attention of Dr. Yersin at the time he was working out the cause and method of transmission of the plague. During the reign of Justinian it was responsible for as many as 10,000 deaths in one day in Constantinople and it was this disease which was responsible for the first attempt at a quarantine in Europe. It is continuously present in China and there is a constant focus of infection in Mesopotamia and the Himalayas. This is the disease which was known as the Black Death of the fourteenth century.

The dog, cat, ferret and weasel are the natural enemies of the rat and may be used in the campaign against him. All dumps should be eliminated, all drains should be screened, all food supplies should be protected and all places cleaned up which might harbor them. There are many poisons suitable, among them barium carbonate is the least toxic to man. Fleas are killed by a heat of 114 F. In a closed container sprinkled napthalene will kill them in 24 hours. If dissolved in benzene and used as a spray it will kill them instantly. Sulphur and hydrocyanic acid gas are also efficacious. Fleas may wander back and forth to a certain extent from the dog to the rat and vice versa and here is a possible complication which must be considered. It is easy enough to deflea a dog but it may be equally easy for him to find others to take their places.

Leishmaniasis and dum-dum fever are confined to certain areas in the tropics and not of so much importance to us. It should be remembered that on more than one occasion, plague has obtained a foothold in the United States and was only overcome at the expense of considerable time and money and a few deaths.

Lice are prolific transmitters of disease. It is rather difficult for us to comprehend the attitude of mind of a few centuries ago which so calmly accepted these various pests as dispensations of Providence and unavoidable. The Buddhist religion which has millions of followers, teaches that no animal life should be destroyed. For this reason these people are always a potential menace to the remainder of the world from which it is difficult for us to thoroughly protect ourselves. The spectacle of a Buddhist priest engaged in picking "cooties" from his body and laying them gently upon a stone from which they migrate back again to his body has always to my mind given a perfect demonstration of the word "futility". The diseases more commonly transmitted by lice are: Typhus fever, trench fever, and a form of relapsing fever.

Typhus fever is common over the world but the last thirty years has seen little of it in the United States, though still present in Mexico. This is a very fatal disease and during the Middle Ages and earlier when the louse had a higher standing in polite society, was the cause of many epidemics and great loss of life. Indian relapsing fever and trench fever, which are not so important to us, are carried by this insect. For a discussion of the means employed to get rid of "cooties" the reader is referred to any member of the A. E. F., who will doubtless do justice to the subject.

The tick is not a very common insect in settled parts of the United States but nevertheless it is at times exceedingly per-

nicious. Rocky Mountain spotted fever is prevalent in certain parts of Wyoming and Idaho and in the former state is accompanied by a mortality of from 75 to 90 per cent. In Idaho it is not nearly so fatal. The tick transmits this disease from squirrels and rats to man. The East and West African and the Persian types of relapsing fever are also transmitted by a tick. In the latter case these insects hide in the crevices and cracks of the house and at night come out and feed upon the sleeping persons and thus infect them.

The bedbug is responsible for the transmission of the European type of relapsing fever which is found especially in Russia. This universal nuisance is of course handled by standard means with which perhaps some of you are familiar. However, the traveler in infected districts may find it difficult to avoid an infection. Fortunately with the discovery of salvarsan, we have a specific for this disease. This same remedy may be used with equally good results in yaws, gangosa and the other forms of relapsing fever.

There are other diseases for which insects are responsible but those detailed are the more important ones.

There is a final thought which I wish to present to you. I can not help but believe there is a certain beneficient effect which results to the human race from the possibilities of epidemics, plague and transmissible diseases. When any collection of people or any country so far degenerate as to lose all desire for cleanliness and hygiene and proper living and subsist in dirt and filth, it is only a question of time until an epidemic comes along and kills them off. In the meanwhile their resistance and bodily vitality has been reduced to the extent that with the increased amount of preventable disease there is a high death rate among adults, a higher death rate among infants, a lower birth rate and they go backward. Unfortunately it happens with the workings of nature's laws that the innocent must suffer with the guilty. I am of the opinion that even without any disease at the beginning, it would only be a question of time until a multitude of persons living under such conditions developed their own diseases.

There is an old saying that "virtue is its own reward." I think one could well say that cleanliness has a much greater reward in the way of health and longer life and happiness. It would seem that those who are engaged in making the world cleaner and destroying the causes of disease are engaged in a most important and responsible duty and should have the thanks and co-operation of all concerned and that is everyone.

The Final Recognition of Radiology as a Specialty*

By Harold Swanberg, B. Sc., M. D. Quincy, Ill.

For a number of years Radiologists have insisted that the practice of Radiology was just as much a specialty and required as much training, etc., as the practice of any of the specialties in clinical medicine. This finally culminated in the establishment of a permanent Section on Radiology in the American Medical Association at the recent meeting of that Association at Atlantic City. No greater compliment could be paid to Radiology than this official act by our great parent

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medical organization. It places Radiology in a position where it deservingly belongs. The following is quoted from the Report of the Council on Scientific Assembly of the American Medical Association to the House of Delegates in regard to full recognition of Radiology.[1]

"For several years, through communications addressed to the Council and through resolutions submitted to the House of Delegates; there has been expressed an insistent demand for the establishment of a Section on Radiology. This demand has been voiced most largely by representative physicians devoting themselves to this especial field of work. It it believed by many that the establishment of a Section on Radiology in the Scientific Assembly of the American Medical Association, will go far toward keeping the practice of this specialty in the hands of qualified physicians and will discourage the tendency, which has become marked in some quarters, to have the practice of this specialty dominated by those who are less well qualified. Last year, two sessions in the Section on Miscellaneous Topics were devoted entirely to radiology. These were splendidly attended, and the program presented was highly commended. At this annual session, three periods in the Section on Miscellaneous Topics will be given over to the subject."

"The Council has frequently expressed itself as believing that no greater number of sections should be established than now exist, and has encouraged as far as possible the reading of papers on radiologic subjects before the regularly established sections of the Scientific Assembly. But because of the success that attended the session held in radiology in the Section on Miscellaneous Topics last year, and because of the enthusiasm and interest of the officers appointed for the sessions to be held this year, as well as because of the importance of the whole field of radiology, the Council on Scientific Assembly recommends to the House of Delegates the establishment of a separate section to be known as the Section on Radiology, and the changing of the By-Laws accordingly."

The J. A. M. A., in an editorial on the success of the recent Atlantic City Convention said:[2]

"The new Section on Radiology was attended by numbers which crowded the capacity of its hall and left no doubt as to the importance of this specialty in the science of medicine."

Let us hope the various state medical societies will follow the leadership of the American Medical Association and each establish a Section on Radiology. The radiologist is just as much a specialist as is the eye, ear, nose and throat consultant and is, therefore, just as deserving of a special section in his state medical society. Wisconsin has already established a Section on Radiology. What state will be progressive enough to be next?

731 Hampshire St.

1. Minutes of the House of Delegates, J. A. M. A., 84:1660, May 30, 1925.

2. Editorial, J. A. M. A., 84:1748, June 6, 1925.

Thirty-nine railroads run out of Chicago. We don't blame them.—*The Thomas E. Pickerill Service.*

News item says that in Georgia and Vermont the law entitles a man to his wife's earnings. What have Florida and California to offer that will offset this?—*Arkansas Gazette.*

Signals help. When the driver in front holds out his hand, you know he is going to do one of three things.—*Youngstown Vindicator.*

That strange light in his eyes while you are giving advice means that he at last discovered how little you know.—*Birmingham News.*

Why Pineapple is a Popular Food

LULU G. GRAVES, B.E., NEW YORK CITY, N. Y.

Since more intellingent attention is being given to the subject, our food habits are changing very materially, and one of the most noticeable changes is the adoption of fruit as a part of the daily menu. Not so long ago fruits out of season or tropical fruits were considered a luxury, but with our present knowledge of their many valuable characteristics, fruits are now considered one of the necessary food materials and even those which were previously thought of as luxuries are now in common use. This transition to the use of more fruit and less meat has been a good one from both the dietetic and financial standpoints.

This discussion has to do with only one of the many desirable fruits, namely, the pineapple.

Physicians are prescribing pineapple and pineapple juice more and more as it has been found to be helpful in such a varied number of conditions.

PROCURABLE ALL THE YEAR ROUND

Fresh pineapple may be obtained in the larger markets at all times of the year and canned pineapple is available in all sections of the country in all seasons. Though for many reasons pineapple comes in the classification of "foods which are good for one", the flavor and aroma are so pleasing that one does not eat it from a sense of duty alone.

Its chief nutritive value is in the sugars it contains. In the green stage there is a small percentage of sugar, but during the ripening process the sugars increase rapidly, especially sucrose, if ripened naturally. These sugars are derived from the starch previously stored in the stalk.[1] If picked green and ripened artificially, a comparatively small amount of sugar developes. As is the case with the majority of tropical fruits, the ripe fruit is too delicate for shipment, which means that fresh pineapples in all the markets in this country, except in a very limited area, have been picked green and are therefore much lower in sugar content than the canned product which was ripened naturally and canned in its native place. Sherman gives the carbohydrate content of fresh pineapple as 9 per cent and of canned as 36 per cent.[2] About two-thirds of this being in the form of sugar.

Other changes which occur during ripening are a slight increase in acidity, development of flavor and softening of the tissue though the true fiber is not materially changed.[3]

A NEUTRAL ALKALINE OR ACID MEDIUM

Pineapple contains an enzyme which aids in digestion of protein. This enzyme converts albuminous substances into peptones and proteose. It is active outside of the body as well as in the digestive tract and acts in a neutral, alkaline or acid medium. The presence of this enzyme must be kept in mind when using fresh pineapple with gelatin as gelatin is a protein and will be digested instead of solidified unless the pineapple has been cooked sufficiently to inhibit this action. Canned pineapple will cause no trouble in this respect as the temperature used in canning is usually sufficient to render the enzyme inactive.

Pineapple, both fresh and canned, is a good source of vitamins A and B; fresh pineapple stands well toward the head of the list as a source of vitamin C, but in the canned product vitamin C is present in lesser amounts because it is more readily destroyed by heat than are A and B.

Thus we see that from the standpoint of

1. Hawaiian Agricultural Experiment Station, Bulletin 28, 1912.
2. Sherman, Henry C., Ph.D., Sc.D., *Food Products*, p. 390-392. Macmillan Co., 1925.
3. Hawaiian Agricultural Experiment Station, Bulletin 28, 1912.

nutrition pineapple ranks high; Sherman gives the caloric value of the fresh fruit as 196 calories per pound of edible material, the canned 696 calories per pound. It has other characteristics besides nutrition qualities, which give it food value. It is refreshing and appetizing and may therefore often stimulate a lagging appetite or its aroma may encourage a patient to eat when he would not otherwise make the effort. It can be used in so many different ways that it may be an ever-present help, in either the home or hospital kitchen.

Methods of Serving

The canned fruit is appetizing and blends well with other food materials, whether it is sliced or crushed. It can be used alone as a breakfast fruit or a dessert for luncheon or dinner, the sliced product may be cut up and used with other fruits in a salad, a fruit cocktail or in a gelatin dessert; the crushed fruit may be served with whipped cream as a dessert or it may be used in frozen desserts or in drinks; either form may be used with rice and served with or without cream, if served with whipped cream it is a particularly dainty dish. A few Maraschino cherries cut up and mixed through gives a touch of color which adds much to appearance. A little fruit added to cream of wheat or other fine cereals will often tempt children to eat them when they would not eat them plain. Pineapple sauted in butter is a delicious accompaniment to meat. When expense is a controlling factor, a small amount of pineapple will add much to the flavor of a gelatin dessert and yet cost very little; The same thing is true of plain rice as a dessert. As canned pineapple keeps well, one can may be made to help in two or three meals. It blends well with apples, oranges, or bananas in a salad, or with cheese a delicious and highly nutritious salad can be made. When the fruit is used in salads or desserts, the juice may be used for drinks or with gelatin.

Pineapple juice is effective in throat irritations and is often most acceptable after a tonsillectomy; gelatin made of orange and pineapple juice is soothing to the raw surface and generally welcomed in these cases.

The organic acids and minerals which give flavor and aroma to pineapple also stimulate secretion of digestive juices and in that way serve as an aid to digestion This is in addition to the aid in the digestion of protein mentioned above.

Another advantage the pineapple offers to the busy dietitian or nurse is ease of service. In the canned product we may have either the sliced or shredded so that practically no time is required for preparation. In using the fresh fruit, it may be cut in slices about three-quarters of an inch thick, the core cut out, and the slice cut in wedge-shaped pieces, the wedge-shaped pieces — placed on a serving plate with points toward the center and a little mound of sugar in the center, if desired. The wedge-shaped pieces can be held by the "eye" and eaten from the fingers. If one can spare more time a very appetizing way of serving this fruit is to remove the rind, hold the fruit with a fork and shred it with a silver fork, add sugar and let it stand several hours. In fact all fresh pineapple is better if allowed to stand for several hours after being prepared and having sugar added.

The manufacturers state that canned shredded pineapple is of the same quality and flavor as the sliced, and in fact it is from the same fruit. In order to have the slices uniform in the can, only the center portion of the fruit can be used, the outer portions are then used for crushed fruit.

Stimulates Peristalsis

In common with practically all fruits, pineapple contains a high percentage of water and cellulose. Since it is an accepted fact that people in general do not drink as much water as they should, the use of fruits

may be of help in this respect; Cellulose provides bulk in the diet, this stimulates peristalsis and for that reason is helpful in preventing or creating constipation.

When planning menus, it is gratifying to find an article which has so many characteristics making it of high food value and which can be used "as is", or combined in a salad, a dessert, or a main dish for luncheon, or an appetizing drink, so that it may be used often without becoming monotonous. Yet it is readily available, easily prepared and well enough liked to be classed as one of the favorite fruits.

More or Less Ancestral

Arthur M. Corwin, M.D., Chicago

Verses Written and Recited at the Twelfth Annual Banquet of the Illinois Society of the Order of the Founders and Patriots of America April 15, 1926

Introduction

Good Master of the toasted bun,
That verbal toast so overdone
It's dry and stale, though without question
A remedy for indigestion;

An ye, scions of gentility
Who boast to own a family tree
That flowered some centuries ago
And fruits in wit and beauty sow;

Give an ear to my parenthesis
Of rambling verse, mixed up with this,
Your smart array of oratory
And graceful camouflage of hoary
Humor culled from ancient story.

No Muses beckoned me along
To dare the heights of epic song
Or lyric poetry to bring;
The Muses won't, and I can't sing.
This message is a moving talk
With Metric feet that make it walk.

If I shall seem to be at times
More jocular in these pert rhymes
Than warranted by theme and space,
And so shall ruthessly displace
A sober thought with one too gay,
The reason's plain—it's just my way.
The banter of a saucy jay,
The bubbling laugh of a bobolink
Can give, I wish were more my way.

Would that I'd looked the record o'er
And found some friendly open door
To join you smug aristocrats
Who claim, by birth, to hold the score
Of values,—held by alley cats
Whose fathers bled in brave defence
Of tabby rights on their back fence;
Who stormed the hostile catterwall
Where murderous boot-jacks flew, and all
The fearsome echos woke the night
Upon the field of each cat fight;
They lived sonorous lives and died
Their fitful ninefold deaths beside.
All honor to those feline nestors
In catalogues of great ancestors.

'Tis thus we humans eulogize
Our forebears as supremely wise
Or good. In doing so, we're right,
For who could prove them otherwise.

Environment and Heredity

We've had, it seems, a grave suspicion
Begot of folklore's strange tradition
That Adam, was a sportive bud
Not grown but made by God, of mud.

We quarrel not with this brave fiction,
Nor yet play host to the conviction;
But must agree that man retains
O'er much of clay mixed with his brains.

"Old Adam" typifies, perhaps,
Throughout the eons that elapse
E'er she, most famous Queen of Sheba,
Emerges from that first ameba,
What ancient form of germ we choose
As ancestor from primal ooze.

But this is what we plainly see—
How base was that heredity
From which we sprang, tho' more or less,
It is the base of our success.

For heritage in cells and schools
Have stamped us sages or as fools;
As characters of worth, or, yes,
As personalities worth less.

The wordy war of argument
Is raging still; environment
Is haled a cure-all to the souls
Of criminals, if given paroles.

Why shut the hardened ones in jail?
Be merciful and give low bail.
In Illinois, we would not horde
The felons; no, our pardon board
Would be of what small social uses
If it could never find excuses
To turn more villians free to kill,
Or merely rob us folks at will?

While we, the "pepul", who resent
Infringements, are the government—
The government whose servants note
That we don't register or vote,
At least don't vote till it's too late
To caucus where they fixed the slate.

Environment! How great her play
Upon the stage of our today!
The radio and film o'erwhelm
Us with the wonders of their realm.

They bid the ends of earth to meet
And pour their factors at our feet.
Man sits in ease at home; a score
Of wizard functioners and more
Bring comfort, luxuries of art
And science from each distant part
Of earth. The Universe unlocks
Her doors to his insistent knocks.
He grumbles at the speed of things,
But takes fast trains and faster wings.
He chafes at noise, the maddening rush
Of life, who wears a hectic flush
Beneath her rouge. But though it kills
He goes the pace and pays the bills

Environment! The "high-brow", mourns
The gross decay of youth, who scorns
Advice, demands a car, 'coon coats,
Goes mad on jazz and movies, dotes
On the lurid magazines, quotes
Mencken; no reverence to speak
Of, and small respect for "dad"; weak
In her taste for reading good books;
Red lipped, bare legged and bobbed, her looks
For show; a giggling, dancing sprite,
A flapper butterfly—a fright!

That's how some critics talk of her,
Nor temper much this lingual slur.

The boy, says that same pessimist,
Is part and parcel of the grist
We grind. The race cannot endure
We're headed for the "bowwows," sure.

Their ancestors are excellent,
You understand, but they're hell-bent
Because they will not heed or do
The things their parents want them to.

Yet, lest we err, read what they said
Some fifty years ago—the dead
Still speak in vivid scenes
Depicted in old magazines.
And these, if published now for truth,
Would fit that estimate of youth
Exactly as a hundred years
Agone have voiced those selfsame fears.
Away with such belittlement
Of our posterity! Well meant
So far as pay checks may concern,
But superficial as to facts we learn.
A faint idea we've sometime had
That Tom and Dick were good as Dad
When he was young as they, and did
What's natural for colt or kid.

And Ma! If she were always staid
As now, she'd staid a prim old maid.

Tom, Dick, and Mary, smiling Anne
And Harry, with all their faults, can
Hold their own with us, who love them,
Who understand them, and not condemn
For standards that WE make for them.

All that's Environment—the dish,
The pool, the sea. But, what's the fish?

The choice of ancestors is fraught
With risks. We know not what we've caught
Till moron evidences or wit supreme
Shall tell that we are milk or cream.

But blood will tell in man or pup.
It's breed that keeps the prices up.
The length of tail or style of coat
Can make of neither one a goat.

When Genius waves her wand of gold,
A Poe or Byron breaks the mould
Of common clay, which, but a trap,
May catch the bird, a handicap
Perhaps to tie or clip its wing;
But, spite of this, the bird will sing.

The warp and woof of us, what Mind
Of mystery, what skill each kind
Of stuff hath picked, its colors fixed
Indelible, the whole designed?
What villian with a guileful hand
Hath sabotaged the loom, a brand
Of sordid tastes in-wrought, to spoil
The texture with a rotten strand?
What threads of silk and linen knit
A virtue with a beauty, fit
To tapestry a king's salon,
To hang illumed where princes sit?

A warranty, we have a right
To claim of parents who would write
Our names within their family tree.
Their answer may be lost of sight,
A taint of brain, a moral blight,
In lieu of virtue's legacy.
One hundred centuries may start
Reform, before Eugenics reigns
To make our matings of the heart
With semblance of respect for brains.
Meanwhile 'twill be of no avail
To "kick"—And look! Few alleys fail
To hold productive junk. We'll try
To meet the gale with reef and bail
And hope to keep the cargo dry.

To Puritans a toast we drink,
Their theologic creed a bit
Too thin to match the way we think;
Their broad-brimmed virtues cover it.

To Puritans and Pilgrims, great
In vision, courage, love of right
And peace, but larger in the fight
For freedom from a king's dictate—

To them we drink; to Hugenot,
To Dutch and Irish, Spaniard, Greek—
To all the races polyglot
Who seek, in love, our melting-pot.

Columbia fair, thou art the land
"With milk and honey blest." Expand
Who will his utmost vision keen,
From heights where farflung beacons stand.
From winged planes survey the scene.
From ocean wild to peaceful sea,
What mortal mind can comprehend
The wealth of thy fertility?

Full are the granaries that send
Thy credits to the courts of gold.
Fuller the rich reserves untold
For millions yet unborn to spend.
But bulging coffers count as dross
Beside the jewel of thy soul
If History should find its loss
Among the debits of her scroll.

"The Great African Cruise"

By J. C. Hoag, M.D., Chicago

At Sea Near Madagascar, March 15th, 1926

The "Great African Cruise" of S. S. Orca, Royal Mail Steam Packet Co., which we are now enjoying, began at New York, January 19, 1926, and will be completed when the ship reaches our point of departure; this probably will be April 28th.

Inasmuch as this is a pioneer cruise perhaps your readers will feel an interest in some of its pioneering features. The itinerary includes islands of the West Indies, ports of Brazil, Uruguay and Argentina; various ports in Southern and Eastern Africa; a number of cities in Egypt; cities of the Mediterranean littoral; a stretch from Gibraltar to Southampton and the final run to New York.

An outstanding feature of this cruise is the opportunity it affords the passengers to visit numerous localities in Southern and Eastern Africa, some of which are far distant in the interior. Another feature is witnessed in the plans made for the passengers to visit both upper and

lower Egypt or, optionally, to see Palestine; these latter excursions were so timed as to enable all to visit the countries in question at the most favorable season. Furthermore, it has been arranged that passengers may spend many months in Europe and then return to New York on some other steamer than the one on which they first embarked.

A very important feature of this voyage, or cruise, is the privilege afforded to make many and extended shore excursions in several countries, particularly Africa and Egypt, under exceptional auspices. All shore excursions are arranged and provided for by the American Express Company whose representatives accompany such excursions. Many months before the cruise began agents of the American Express Company were actively engaged in making preparations for the reception of our tourists in many lands. These plans included reservations of hotel, railway and automobile accommodations and the securing of cooperation on the part of various state and civic bodies. These arrangements are bearing rich fruit, particularly in the British parts of Africa; for the citizens of all the States of the Union of South Africa have united in welcoming our travelers. Never before has there been such an invasion of Americans in South Africa and the citizens there appear to view the situation as a real treat for themselves. Accordingly the mayors and civic bodies of the various cities already have given us many receptions and excursions and in fact they are spending their money and time upon us in lavish manner.

The longer shore excursions have not been made by us en masse but we have been divided into groups some of which have traveled far into the interior, being away from the ship even as long as twelve days. Such arrangements can only be accomplished by great organizations and I have nothing but praise for the manner in which the American Express Company has done its work. Travel in South Africa, even by railway trains is expensive and often uncomfortable, but on the trains of the South African Railways the best of everything was provided; all trains were trains de luxe, the accommodations being such as are not ordinarily obtainable. For these trains the South African people had supplied certain delicacies in greatest profusion; at any moment of the day the tap of a bell would bring to the passenger delicious fruits of great variety and without cost. In some cities the residents gave balls with every sort of refreshment. The visitors were designated by little badges and the citizens were instructed by the Mayors to consider a badge as an introduction and act accordingly. In other towns the citizens freely offered their automobiles and several acted as local guides. In one city, at least, Girl Scouts waited on the tourists and with such enthusiasm and skill that one of our number bestowed upon them a sum of $500 in appreciation of their efforts.

At times we had well nigh broken down the entertainment resources of entire communities, but still there was no inconvenience for the enterprising Express Company had secured the use of private cars and drivers. Unbounded enthusiasm was shown by members of the parties which visited Victoria Falls, perhaps the greatest of all cataracts; even in this rather remote locality adequate accommodation had been provided for numerous contingents. Our stops and visits are many and wherever we go we find the towns people awaiting us; at once we enter excellent automobiles and whether our stay be long or short there is little delay or friction; we slip into our activities as smoothly as a ship is launched down the greased "ways" provided for her and soon we realize that

our ways, too, have been greased in advance.

Just now we are entering the tropics for the second time. Tomorrow we are to land at Mozambique, where Vasco da Gama landed in 1498 and where the Portuguese built a fort in 1508, which still stands. The weather is warm, the temperature of the air is 82 degrees and that of the water 83 degrees; but cooling breezes are to be found on certain decks. The passengers play games or doze in their deck chairs, some splash around in the swimming pool, others, still, write letters to be posted with unaccustomed stamps on them.

About half our voyage has been completed; much that is absolutely novel still remains in store for us. After reaching Mediterranean waters most of our travelers will find themselves in more familiar surroundings, for our companions are seasoned travelers. Africa alone is a new experience to them and independent travel in Africa never could have shown them so much or given them so many luxuries as they have enjoyed on this cruise. The American Express Company maintains a well equipped office aboard ship, very much like one of their offices ashore but with lecturers in addition to their usual personnel. Tomorrow morning our passengers will exchange some of their money for the currency of Mozambique; then they will go ashore and fancy how the town looked when Vasco da Gama first saw it.

With these introductory paragraphs the true narrative of our cruise begins.

On the eve of our departure from New York the passengers began to go aboard ship after dining on shore. There was no need to hurry for the ship was not to sail until 1:00 A. M. and there was abundance of time in which to inspect the ship and look up remembrances from friends. There were vast piles of letters, telegrams, flowers, sweets and books, so there was plenty to do in making acknowledgment before sailing.

We soon found the Orca to be big, staunch and wonderfully clean, and presently we learned that the Royal Mail Steam Packet Company is the oldest chartered company of its kind with a great fleet of ships in every sea. With its own traditions of excellence to maintain, as well as those of the British Marine Service, we cannot but feel we are in safe hands; closer acquaintance with the personnel of the Orca only serves to confirm this feeling.

The great majority of our passengers are Americans and they come from many States, even far away California being numerously represented. We have many of the medical profession aboard and Chicago is represented by Drs. Emil Ries and R. C. Wilson, as well as by myself. Presently we find that our companions are a particularly sophisticated lot from the standpoint of travel; a single voyage of circumnavigation is scarcely to be mentioned. It would seem that our travelers have chosen this particular voyage because it is the first one which has made Africa comfortably accessible and they already have visited most of the other great countries.

As we entered tropical waters a wireless message informed us of sanitary conditions in Trinidad which made it imprudent for us to land there as tending to put a blot on our clean bill of health. Accordingly our course was changed somewhat and the ship headed for Barbados. This change in course gave us opportunity to see many of the islands of the West Indies. We steamed close in to St. Thomas, of the Virgin Islands, and observed that the pretty town on Charlotte Amalie had made important progress since a former visit made by us.

We obtained a fine view of the Island

Dominica, thought by many to be the most beautiful of these islands for it is a mass of precipitous mountains which everywhere are clad with verdure, it is scored with deep ravines where one could discern growing bananas and palm trees. Dominica reminds one of the description of Jamaica given by Columbus to Queen Isabella: "Your Majesty," quoth Columbus, "Jamaica looks like this"—and he crumpled a handkerchief in his hand and threw it down on a table.

Martinique looked less beautiful; the mountains are not so steep and vegetation is less luxuriant. The City of St. Pierre, destroyed by the eruption of Mt. Pelee, shows signs of regeneration. Ft. de France was seen only at a distance because of shoal water, but we tried to discern that lovely statue of Empress Josephine which stands in the plaza surrounded by majestic royal palms, for Martinique was the birthplace of this unfortunate woman whose life was so picturesque and tragic. The lovely Island Sta. Lucia, was very plainly seen; it is a charming island, and far up on its mountain slopes we could see its well built military station. The West Indies constituted the great training ground of the British Navy and memories of Nelson, Anson and Benbow are still lively traditions in the hearts of the inhabitants. Near Sta. Lucia we saw that steep, almost inaccessible peak called Diamond Rock, up whose sides the British dragged their cannons and thus converted the rock into a stationary warship. Near this peak we witnessed a magnificent rainbow which flung its brilliant colors through an arc extending from a near island to another distant one.

At Barbados we landed in lifeboats at the quaint city of Bridgetown. Here we found automobiles awaiting us and we spent many hours touring the island. The Barbadian sugar industry increased by leaps and bounds during the Great War and is still very active. There are a few large plantations but many small ones and many mills. The island is mostly of coral formation but here and there land is seen. The soil appears to be good but shallow. The island supports a dense population of blacks and everywhere we saw hundreds of men and women working in the cane fields. They are very indigent and ill clad but merry and polite. Most of them ask for coins, holding out their hands in supplication and appealing to "My lady," "Sir" and "Boss." No grains are raised and flour is imported. There are cattle, but these are inferior in quality and hay must be imported for them. Sugar is taken to Canada to be refined and when returned to the island is quite expensive. Meat is brought in from the Argentine.

We were taken to a beautiful hotel for luncheon and here were regaled upon excellent flying fish. Dr. Casey Wood has given us glowing accounts of Barbados and we have long been indebted to Captain Maryatt for his romantic stories of this island and the others of the Carribean Sea; but, of course, Maryatt wrote fiction while Casey (we hope) wrote nothing but truth; in any event we feel like backing up Casey. Barbados will always be a pleasant memory, with its picturesque scenes. We cannot forget the merry negroes and the dusky women with their stately carriage as they walk down the streets carrying great burdens upon their heads. Later on we had fancy dress balls on board ship and one of our young ladies blacked up and represented a Barbadian woman carrying a basket of fruit on her head; for this she took a prize, the representation being inimitable.

Festivities aboard our ship are numerous and enjoyable. Before reaching Barbados we had a get-together dinner, resembling a New Year's eve party with

plenty of good cheer and much merriment. Of course, we had paper hats, balloons and toys with which to make the welkin ring. Dancing occurs almost nightly and our ship is so big that the sea has not yet disturbed the dancers. At one of our fancy dress occasions your subscriber took first prize for his representation of "The Spirit of Deck Sports"; his costume was made up of tennis nets, rope quoits, scoring boards and various other implements of deck games. Our lecturers give us accounts of countries to be visited and these lectures are illustrated with lantern slides and moving pictures. By the way, the proper thing for a tourist, nowadays, is a small camera with which to make moving pictures and of these there are many aboard. Films are developed en voyage and from the best of these, long reels are made and demonstrated on the deck.

After a long straightaway course from Barbados, over warm waters and through tropical airs and after much amusement on Equator day, when Neptune came aboard and initiated the Neophytes, we reached Rio de Janeiro at sunrise. Now, there are many tourists these days who seek thrills; perhaps in younger days they had them; perhaps thus far their quest for thrills have been unavailing, perchance their souls are incapable of thrills; but except for these last mentioned unfortunates we defy anyone to see Rio de Janeiro for the first time or any subsequent time and remain unthrilled. For this city (with its magnificent environs) is one of the most soul inspiring scenes anywhere to be witnessed. While it is impossible for any pen to depict this scene let an humble one at least suggest it. To the enchanted eye an unrivaled picture is displayed. Here sharply defined mountains and hills have descended from greater heights to the sea itself. Yes, some of these far-flung mountains have been thrown into the sea itself where their verdue-clad heads appear as islets emerging from a cerulean sea. Threading these islets the ship bears into a tortuous bay which leads into the heart of a great and handsome city whose smooth boulevards, winding this way and that, keep one ever near the sea, the bay or the wonderful mountains. These are friendly mountains; their steep slopes are separated by narrow valleys; on either side they pour down their wealth of tropic verdure and vivid flowers as though to overwhelm the wayfarer. Rugged, unclothed steeps are few but there are at least two exceptions; these are the Sugar Loaf and Corcovado, the Hunchback.

Come with me and ascend the Sugar Loaf (Pico de Azucar). See! the American Express Company has provided us with a good automobile and an interpreter. As we roll over the smooth pavements the interpreter points out the most outstanding features of a well-built city. Observe the excellent public buildings, the well equipped stores, the commercial buildings of modern construction, the palatial hotels. Is there anything to remind us we are in South America? Well, no; such cities are common enough on the continent of Europe except that here construction often looks more modern; indeed, ancient buildings are not greatly in evidence. The parks are very beautiful and we see some strange forms of animal life and unfamiliar examples of vegetation of exotic character. Now here we are, let us get out at this little park and await conveyance for ascending the peak. There is the peak; we are going up to its top which well might be termed a "needle" instead of a "peak." Why it is inaccessible," you say. "How high is it, and where is the road?" "Don't you see that wire cable from which a car hangs suspended?" "Yes, it looks like one of

those little boxes which carries small packages and money in a department store; It looks insecure and dangerous." "No, there is no danger; the equipment was made and installed by Swiss engineers and accidents are unkown." "Just step into the car; you see it is larger than you thought, it holds twenty persons." "Off we go; do you feel any jolting or swaying? No? Well, you are not going to feel anything unpleasant; it is like the gliding of an aeroplane. Now we alight here on top of the hill, walk thru a little park and finish the ascent on a steeper cable. Here it is, enter this car and look up. There is the final peak and it stands 1300 feet above the sea. Observe as we ascend; the car maintains a horizontal plane; but see, we are getting close to the granite surface of the peak. Yes, it is bare; it supports no soil; a cat cannot climb up here. Now we get out, walk up a few steps to that pagoda and it will seem to you as though the Kingdoms of the earth were at your feet. You see a large hotel in the city and yet with a fine waterfront that is part of the bay." "Away over yonder you can see a great hotel with dazzling white walls; before it there is a wide strip of white sand and beyond the sand you can see a wonderful blue sea; that long raised line is the surf that seems never to cease foaming upon the strand. The hotel is a new one, is very sumptuous and contains a vast gambling casino. The hotel, called the Copacabana is where we lunched. The simple name of this hotel is difficult to remember and some call it "cocoa-banana"!

Should a still more extensive view be desired one ascends Corcovado, the Hunchback. This, too, is close to the central part of the city and although it is steep and 2300 feet in height its ascent is less thrilling than that of Sugar Loaf. One gets into the little train of a mountain railway and with gentle incline and many a curve makes a long delightful excursion to the Summit. The road runs for the most part in deep cuts right through dense forests and wonderful verdure. Here and there, on shelf-like mesas, hotels are seen to which resort may be had during the hot months. From the Summit of Corcovado the view is like that from the Sugar Loaf; one looks down upon billowing hills; presently a wisp of cloud floats over us and all is obscured; the cloud wisks by and we view the boulevards of the city winding along the meandering lines of its bay. Everywhere there is color; the blues, greens and whites of the ocean, the green of the trees and grass, the yellows, pinks, reds, blues whites and purples of flowering trees and shrubs.

During all our stay in Rio the city was en fete, because of the arrival of an aviator from Spain, who though lionized to the last degree accepted his honors with becoming reserve.

It appeared to many of us that the distribution of wealth in Brazil is not fair, the rich being very rich and the poor very poor with intermediate classes who are poorly requited for their services. As in other South American countries the cost of living is high; manufacturing is backward and heavy imposts are made on imports. Although far below the Equator Rio was hot and as we went further from the Equator the weather still remained very warm. A night's sail took us to Santos, the great shipping port for coffee; here the harbor was crowded with ships from every port. From Santos a mountain railway takes one to São Paulo, whose population approximates 400,000 individuals of many races. The railway is a triumph of engineering skill and exhibits a vast amount of very wonderful revêtement work. The highest point of the road is reached at a level of 3,000 feet whence it descends somewhat to the city

of São Paulo, a thriving, industrial and agricultural center. Here a pleasant day was spent and our travelers received a peculiar thrill from a visit to the so-called "snake farm," or Butuban Laboratory. Here diphtheria antitoxin is prepared as well as Antivenin for the cure of snake bites. Huge numbers of snakes are kept in hut-like structures of cement work? An attendant handles and cares for the reptiles. Employing a hook, attached to a long staff, he hauls out from the hives incredible numbers of most poisonous reptiles, treating them as though they were innocent pets. At times he teases them to strike him, but their poison fangs encounter harmlessly the leather of his puttees. With bare hands he tightly holds a reptile by means of his hooked staff, seizes him close to the head and makes him discharge his venom into a glass dish From the mixed venom of the various poisonous snakes a polyvalent serum (from the horse) is prepared. This preparation is said to be very effective in its action. Later on we visited another laboratory in South Africa where a similar antivenin is prepared. In neither of these laboratories is the attempt made to prepare a serum for each variety of poisoning. The idea is that all poisonous snakes kill by paralyzation of the nerve centers or by haemolytic action upon the blood cells, and that it is much better to have a polyvalent serum because of the uncertainty in most cases of the character of the snake which has bitten a given patient.

Our next stop was made at Montevideo, which impressed us as a well built city characterized by good buildings and streets with handsome homes. Evidence of considerable manufacturing and meat packing was seen. This city is near the ocean on the eastern bank of the immensely broad Rio de la Plata which higher up, even at Buenos Aires, is still so wide that one cannot see across it. Service between Montevideo and Buenos Aires is carried on by means of excellent steamers. The great river carries down its stream immense quantities of silt, which gives it a very turbid appearance and although the largest steamers readily ascend the river the channel is narrow and marked by many buoys.

Buenos Aires, reached by an overnight's sail, is a most imposing city whose excellent harbor and wonderful quays are crowded with an astonishing number of ships whose freight is handled by the most approved mechanical devices. The city has excellent streets, fine buildings, both public and private, and bears external evidence of great prosperity. It is certainly a modern, up-to-date city of cosmopolitan aspect. Italians are present in conspicuous numbers. As in Rio, so here in B.A. (its common commercial designation), the city was excited over the Spanish aviator who had beaten us to it, having just arrived from Spain via Rio; he was received with a furor of excitement which lasted for days. Additional stir was caused by elaborate preparations being made for the annual carnival and before we left the city its principal squares were illuminated in a brilliant manner.

Our entertainments and excursions were numerous and varied. One day we made a trip to "Tigre," a popular resort, some miles out from the city and near the river. At this point there are numerous wide, natural channels communicating in intricate manner with the Rio de la Plata, very much as they do in some of the great river deltas; perhaps this, too, is a delta. Argentina being in general very flat, at Tigre we were standing only a few feet above the river; and here, upon a bed of silt, the rich soil bears an infinite variety of vegetation, even citrus fruits being successfully raised. A large fleet

of motor boats conveyed us through the canals past handsome homes, hotels and club houses. At the principal hotel we lunched, danced and were entertained by cowboys from the pampas and by skilled dancers of the tango.

Other pleasures included long drives over the boulevards of the city itself. We visited the Plaza Congreso and the congressional building; we drove through the Avenida de Mayo, a very beautiful street. In other streets, parks and in the cemeteries we saw many fine pieces of statuary and learned that Avenida de Mayo and San Martin had nothing to do with the various visits to South America made by Drs. Charles Mayo, of Rochester, and Franklin Martin, of Chicago, as confessed, indeed, by the latter in his excellent book on the South American cities. We lunched and dined in various hotels and at one of them danced with many guests from the American colony who had been invited by the Express Company to meet us. As guests of the great Jocky Club, we lunched at the Hipodromo Nacional, where we witnessed horse racing, a form of amusement greatly in vogue with the mercurial Latin-Americans.

Then ensued the long run from B.A. to Capetown, South Africa. It was very warm when we left B.A., but from the next day on the temperature was quite delightful. We proceeded directly east following pretty closely the thirty-seventh degree of south latitude. The little group of islands, called Tristan de Cunha, lying midway between Buenos Aires and Capetown, just between the continents of America and Africa and 1,000 miles south of the better known island of St. Helena enabled our Commander to offer us a sight not often witnessed, namely, that of visiting one of the remotest habitations in the whole world. The Commander therefore announced that he would endeavor to call there, conditions of weather permitting, and that we might contribute to the necessities of the inhabitants of this dreary region by making them a present to consist of flour, tobacco, sweets and reading matter. Great interest and even excitement was manifested by reason of this announcement. From limited sources of personal and written information, we were apprized that the island group consists mainly of the great peak of Tristan da Cunha, which rises with incredible steepness to a height of more than 7,000 feet; that it was discovered by one of the early Portuguese navigators and was first inhabited by a few American sealers about the year 1797. When Napoleon was imprisoned on St. Helena, far to the north, the British placed a guard of soldiers on Tristan da Cunha to assist in maintaining the perpetual banishment of their feared enemy; from this nucleus and from occasional accessions of sailors, the present settlers have descended. With the decadence of whale and seal fishing and the gradual disappearance of sailing ships which formerly visited Tristan da Cunha to obtain water and food, this little settlement has become even more obscure and remote than Pitcairn's Island, the abode of the descendants of the "Mutineers of the Bounty." To be sure the British government has offered them land in Africa, for a better abode, and one of their naval ships, from South Africa, calls there once a year to leave a dozen letters, or so, and at irregular intervals, years apart, some other vessel may call; but upon the whole the islanders have been nearly abandoned to their own devices and accordingly the advent of any ship is the cause of greatest excitement on the part of these people. So one Sunday morning our passengers strained their eyes to obtain a view of the volcanic peak for which we headed; but unfortunately a heavy fog settled down reducing visibility to the extent of little

more than a mile. As a result of this we actually passed the island without discerning it; then, opportunely the clouds lifted a bit and as the sun peeped dimly out chance was afforded to make astronomical observation; this done and the true location of the island having been determined, the ship's course was changed through an arc of 180 degrees and we slowly approached a most forbidding coast. Here a furious surf was seen and higher up a few houses dimly were discerned, while powerful glasses even revealed a few men. Whistles were blown, the siren shrieked and guns were fired to apprize the islanders of our presence. Then a raft, supporting a huge box, was launched into the sea bearing four British and American flags, to enable its presence to be seen from a considerable distance. Box and raft were constructed of strong planks securely bolted together and the box was made waterproof, with great care. So we did not get to see the inhabitants and converse with them as we had hoped to do; but we trusted that the islanders would be able to find the raft and tow it to land. This unfortunate episode caused great disappointment to everyone of us.

(*To be continued.*)

Bring the Hammer!—First Visitor—"My dear, these cakes are as hard as stone."

Second Visitor—"I know. Didn't you hear her say, 'Take your pick,' when she handed them around?"—*Denver Clarion.*

Piscatorial Problem.—"Father, do the big fishes eat sardines?"

"Yes, my son!"

"How do they get them out of the tins?"—*Buen Humor* (*Madrid*).

Not as Tall as He Was Short.—"Can you give a good description of your absconding cashier?" suavely asked the detective.

"We'ell," answered the hotel proprietor, "I believe he's about five feet five inches tall and about $7,000 short."—*American Legion Weekly.*

Or Try a Kitten.—"I'm sorry, but this apartment won't do, either. Not a room in the place big enough to swing a cat in."

Fed-Up Agent—"Ah, then, why not find another hobby?"—*Life.*

Verbal Distinctions, Anyway.—The Summer Boarders' Constant Cry—"Have you much variety at your boarding-house?" Yes, we have three different names for the meals.—*This Week in Buffalo.*

A Trifling Oversight.—"Why so glum?"

"The doctor has just prescribed rest and change for me."

"Well?"

"He advised me where to get the rest, but he didn't tell me where to get the change."—*Jacksonville Times-Union.*

Bobby Knew the Answer.—Our Bobby was in a store with his mother when he was given candy by one of the clerks.

"What must you say, Bobbie?"

"Charge it," he replied.—*Pittsburgh Christian Advocate.*

A Time to Dissemble.—Woman in Auto—"Good heavens, son; we've just run over a poor man! Stop! Stop!"

Driver—"Keep still, mother; you'll make every one think this is the first time we were ever out in an auto."—*Le Rire* (*Paris*).

Evil Communications.—"And never let me see you back here again," said the judge sternly.

The prisoner looked about, at the jury, at the judge, at the lawyers, at the court clerks, and replied: "I won't come back, sir; I'll keep out o' bad company."—*Pittsburgh Christian Advocate.*

Couldn't Be Softer.—"Jimmy," said a mother to her quick-tempered small boy, "you must not grow angry and say naughty things. You should always give a soft answer."

When his little brother provoked him an hour afterward, Jimmy clenched his little fist and said, "Mush."—*The New Guide.*

Thoughtful Precaution.—A woman went to the bank and asked for a new check book. "I've lost the one you gave me yesterday," she said. "But it doesn't matter. I took the precaution of signing all the checks as soon as I got it—so, of course, it wont' be any use to any one else."—*The Efficiency Magazine.*

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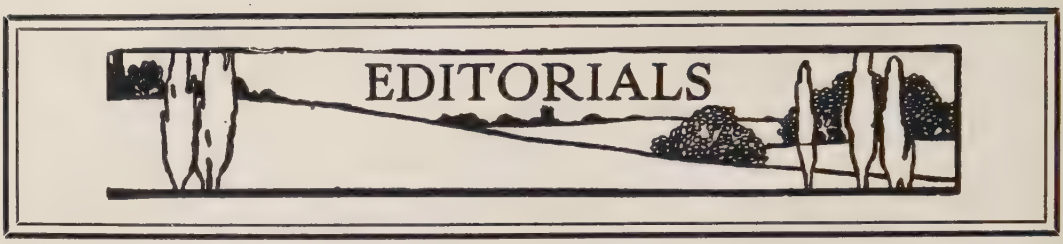


ROYAL COLLEGE OF SURGEONS, EDINBURGH

Our esteemed correspondent, Mr. P. J. Sterling-Boyd, sends us the following interesting extract printed in "The Scotsman," April 3, 1926, containing many historial notes covering the last four hundred years of the college, and published by Clarendon, Hyde Creswell, F.S.A., which can be obtained from the publishers, Oliver & Boyd, of Edinburgh and London.

In 1505 the Barber-Surgeons were granted a Seal of Cause, or Charter of Privileges, by the Town Council, and enrolled among the Incorporated Trades of Edinburgh. Since then the Craft has had a chequered, often a stormy, but, on the whole, a remarkably distinguished and successful career in the city. Indeed, it would be hard to mention any branch of public service from which the town has derived more fame and benefit than that of Surgery. The Barber's Craft has long ago dropped out of conjunction and competition; although Edinburgh records seem to show that it was the elder of the two callings that were so long, and, according to modern ideas, so incongruously associated. These records have been assiduously studied by the late Mr. C. H. Creswell, who, from 1899 to 1918, was Sub-Librarian and Officer of the Royal College of Surgeons; and the task he set himself of telling, with full documentation, the story of that great institution, but interrupted by the call of the War, in which he died in service, has been completed by two prominent members of the College, who, however, tell us that while rearranging and editing the materials, part of which have already appeared in the "Edinburgh Medical Journal," they have made "no additions and few deletions."

The volume,* privately printed in handsome form for the College, carries its history, as Craft, Calling, and Royal College, down to the quarter-centenary year, and is embellished by views and by portraits of distinguished members. The views include the tenement in Dickson's Close (still standing) where, in the middle of the seventeenth century, the Incorporation, which by this time held the premier pace among the city Crafts, had their first "Convening House"; and original hall in Old Surgeon Square, which continues to bear over the original doorway the date (1697) of its erection; and the interior of the present Hall and Museum in Nicholson Street, opened in 1832. Of the old doorway it is said, "This relic is still where it was when Monteath set up his first 'Hot Pot' in the laboratory below, and Eliot, M'Gill, and the father of Monro primus passed beneath its venerable portals. Simple and unpretentious as it may be architecturally, this doorway has a peculiar romantic interest for Fellows of the College. Through it passed the Bells (John and Charles), Liston, Knox, Syme, and many others whose names are part of the history of the College. The late Principal of the University, Sir William Turner, a president of the College, recognizing the historical association of the doorway with the Surgeons, undertook that

*The Royal College of Surgeons of Edinburgh. Historical Notes from 1505 to 1905. By Clarendon Hyde Creswell, F.S.A. (Scot.) 10s. net. Privately printed for the College by Oliver & Boyd, Edinburgh and London.

when the building of which it forms a part comes to be demolished, the doorway will be handed over to the College for preservation."

Many other interesting historical and topographical facts have been unearthed by Mr. Creswell from the early records of the Craft, who jealously guarded their privileges, and were not, in earlier or in later days, wanting in pugnacity. A chapter is devoted to some of the "Social and Domestic Activities" of the College, including the "Apprentices' Banquet" and the "Dinner to the Magistrates," at which and at meetings in the "howff" in Clearihues distinguished members, like "Lang Sandy Wood," approved themselves good trenchermen. The separation of the Barbers from the Surgeons, completed in 1722, when "the Barbers lost caste and the Surgeons lost financially," was a long and sometimes painful process. Its original phases are thus summed up:—

In looking at the conditions surrounding the union of the two crafts in 1505, we may safely suggest that the barbers were then more numerous and of more influence than their intended colleagues. The union should not be looked upon, as is customary, as a messaillance for the surgeons, for if we remember that the barber of that day was also the surgeon of the monastery—and thus the first to specialize in surgery—we realize that the coalition which took place was no more than a union between the chirurgeon of the laity and the chirurgeon of the priesthood. The duties of the latter were many and various. About the period of which we speak, several references to him appear in the accounts of the Lord High Treasurer in connection with the making and selling of aquavite, and as fourteen shillings were paid to one for "taking furth the Kingis tuth," it is evident that his professional abilities were not confined to the trimming of beards. Then there was the King's barber, who, besides supplying His Majesty with "holland claith at ten shillings the eln," supplemented his income by selling crossbows and daggers. All this, in addition to his clipping, polling, and shaving, stamps him to have been a busy man whose trade appealed to one and all, from the highest in the land to the meanest citizen. On the other hand, his newly made brother the surgeon would not be nearly so much in request, he having to depend more upon the cracked heads and broken bones consequent upon some night brawl in the High Street, or the more serious tumults which were then of no rare occurrence in the Scottish capital.

There were the categories, and consequent divisions and rivalries, of "simple barbers," surgeon-barbers, and surgeons; there were also feuds, followed for a time by amalgamation, between surgeons and apothecaries, and quarrels with the College of Physicians, and within the body of the Fellowship itself; and these afford many humorous as well as grave passages, and throw light on the moral conditions as well as on the social habits of past generations. The morals of the city and nation must have been quite as bad in 1703 as at any time since, if faith is to be placed in an "Act and Resolve against 'Immoralities'" drawn up in that year by the Incorporation. After reciting the failure of the Darien Colony, the "dreadful fires," the "terrible blowing up of the several barrels of gunpowder in our suburb of Leith, whereby a great part of that place was reduced to a ruinous heap," and other judgments evidencing the "wickedness and abominations of city and country," the Act sums up with "the crying sins of profanity, blasphemy, and vile hypocrisy, Sabbath-breaking, lukewarmness and formality in public and private worship, and immorality of all sorts which overflow the city and nation like a flood."

Not long after, in 1711 and again in 1725, the Incorporation found it necessary to denounce and repudiate offences that more closely affected the members — namely, "the violation of the sepulchres in the Greyfriars' Churchyard by some who most unchristianly have been stealing or at least attempting to carry away bodies of the dead out of their graves, a practice to be abhorred by all good Christians" — a practice in which, it was shrewdly suspected by the public, Fellows of the College and their apprentices were concerned. By the Seal of Cause of 1505, the Town Council allow the surgeons "one body a year" for anatomical purposes; the accounts for the flitting to Dickson's Close, in 1647, contain an item of 6s. (Scots) for "carrying the skeleton to the Convening House." But in those times, and afterwards, the supply of "bodies" was woefully inadequate to the requirements of advancing anatomical science:—

Body-snatching, nevertheless, continued more or less throughout the century, and frequently led to rioting by the populace. In 1724, we read of a scuffle between some surgeon apprentices and the friends of a woman supposed to have been executed, for possession of the body. Luckily the latter were successful when to their great surprise they found that life had not yet departed. The woman, afterwards known as "Half-hangit Maggie Dickson," soon recovered, and lived for many years. The records of the Tolbooth also contain an account of two women being executed for stealing a child and selling its body to the chirurgeons for dissection.

The problem came to a head a hundred years later, and was solved by the legislation begun with the Anatomy Act of 1831. Among the College papers is a letter addressed to the Secretary of State by the famous, or notorious, Dr. Knox, remarkable for the business-like terms in which the importation of "cadavers" from Ireland, where, it appears, popular feeling against the traffic was not so keen as in Scotland, is discussed:—

"A short time ago I was anxious to import anatomical subjects via Liverpool—they were in the best possible condition, having been selected by one of my assistants sent to Ireland for that express purpose; they were most carefully packed, and indeed deceived all those connected with the shipment and transport, until their arrival in the Brunswick Dock of Liverpool. There the packages were broke into by an officer of the Customs and Excise, the contents by some means or other got into the hands of the local police, and were afterwards, as I have assured, interred at the public expense. . . . Anatomists generally are most anxious to avoid public scenes such as these, and for this purpose they are careful to select subjects which are claimed by no relative or friend, and thus often avoid the painful necessity of violating the burial grounds and by so doing inflicting a shock on the most sacred feelings of human nature. Now, when anatomical subjects procured under such circumstances are nevertheless seized on their way to the schools, very alarming reprisals are made in the burying ground of the place where the seizure has been made, often without the smallest regard to risk or circumstances.

"The letter, it is stated, "bears the date 3rd November, 1828 (Monday), but the fact that Burke was arrested on Saturday night, 1st November, and Hare early next morning, may have had something to do with its never being sent to the Secretary of State."

Important public matters are discussed and explained in the chapters that treat of the connection of the College with the founding of the Royal Lunatic Asylum,

the Royal Infirmary, the Physic (afterwards Botanical) Garden, and other institutions and movements that have played their part in surgical and medical education and training; of the connection, only finally severed after lasting three centuries and a half, of the College with the Incorporated Trades, the Convenery and the Town Council, and of the duties of the office-bearers known as the Kirkmaster, the Boxmaster, the Clerk, and the Officer. The narrative is brought down to the fourth centenary year, when with the movement for the admission of women begins a new chapter in the history of medical education in Edinburgh.

TWO GREAT TUBERCULOSIS CONFERENCES

The International Union against Tuberculosis will meet in Washington, D. C., September 30th to October 2nd, immediately followed by the annual conference of the National Tuberculosis Association October 4th to 7th.

Preliminary arrangements for the international meeting of the National Tuberculosis Association indicate that several of the leading tuberculosis specialists from different European and other foreign countries will be in attendance.

Among the distinguished men and women who have definitely promised to attend and address the meetings of the National Tuberculosis Association are Sir Robert Philip, the founder of the world-famous dispensary system of Edinburgh; Col. S. Lyle Cummins of Cardiff, Wales, director of the King Edward the Seventh Research Foundation for Tuberculosis; Dr. G. B. Roatta of the Tuberculosis Dispensary of Florence, Italy; Prof. Gaetano Ronzoni, Professor of Medicine at the University of Milan, Italy; Dr. Vittorio Ascoli Professor of Medicine at Rome; Dr. Leon Bernard of Paris, Professor of Hygiene, and Secretary of the French National Tuberculosis Association; Dr. Edouard Rist of Paris, Physician to the Laennec Hospital; Dr. Ferdinand Sauerbruch of Munich, one of the world's leading authorities on chest surgery; Prof. Frederick Neufeld of Berlin, Director of the Robert Koch Laboratories; Prof. Lydia Rabinovitch of Berlin, one of the foremost bacteriologists, and Prof. Hans Christain Jacobaeus of Stockholm, Sweden, known throughout the world for his skill in surgery of the chest. It is expected also that among others who may attend the meeting will be Dr. A. Rollier of Leysin, Switzerland, a leading authority on heliotherapy; Dr. F. N. Kay Menzies of London, authority on colonies for cured cases of tuberculosis, and Sir George Newman of London, Minister of Health of Great Britain.

A number of other European Asiatic tuberculosis specialists have also been invited to attend this meeting. It is anticipated that in quality of material to be presented this international meeting of the National Tuberculosis Association will excel any similar gathering since the International Congress on Tuberculosis of 1908.

Special arrangements will be made for interpreting foreign language papers. All of the papers will be published in the annual volume of Transactions of the National Tuberculosis Association. The sessions of the National Tuberculosis Association are open to all persons interested. The sessions of the International Union Against Tuberculosis are open only to members.

Further information about either of these meeting may be obtained from the Chicago Tuberculosis Institute, 360 North Michigan Boul., Chicago, Illinois.

INSECT BORNE DISEASES

A number of widely known scientific authorities in the disinfectant and insecti-

cide field were in attendance at all sessions of the Twelfth Annual Convention of the Insecticide and Disinfectant Manufacturers' Association, held at the Hotel Astor, New York, December 14, 15, and 16, 1925. Among them were Dr. H. D. Pease and Dr. L. C. Himebaugh of the Pease Laboratories; Major Matthew A. Reasoner of the U. S. Army Medical Corps; S. A. Siegal, chief chemist of the Sanitas Co.; Dr. Wm. Dreyfus of the West Disinfecting Co.; Dr. G. F. Reddish of the U. S. Dept. of Agriculture; Dr. M. H. Dittmar of Lehn & Fink, Inc.; R. P. Walsh, Chief Sanitary Inspector of New York, and E. A. Buckle of London.

A letter of regret at his inability to be present was read from Dr. J. K. Haywood, Chairman of the Insecticide and Fungicide Board of the U. S. Dept. of Agriculture. This is the first meeting of the Association Dr. Haywood has missed in ten years. The Doctor was indisposed at the time, and was sent best wishes for a speedy recovery.

By a large majority vote, it was decided to hold the next mid-summer meeting at Quebec, Canada, with Chateau Frontenac as headquarters. The time of the meeting is to be determined by the Board of Governors and will be announced later.

Evans E. A. Stone, of Standard Oil Co. (New Jersey), elected second vice-president of the Association, gave a most interesting talk on "The Use of the Motion Picture in Advertising an Insecticide." Mr. Stone's address was illustrated with the showing of a film descriptive of the habits of insects and methods of control in the household.

The paper of Major Matthew A. Reasoner of the U. S. Army Medical Corps on "Tropical Insects and Insect Borne Diseases," was so well received that we take pleasure in reprinting it in this issue of the RECORDER.

A very marked increase in the activities of the insecticide members of the Association during the past year was reflected in the prominent part which they played in the convention this year.

RACE DETERMINES DISEASE RESISTANCE

That the restriction of certain diseases to certain races is due to environmental and heredity factors is the opinion voiced by Prof. J. H. Lewis, pathologist of the University of Chicago. The scientist also states that the vital statistics compiled in the various states do not accurately tell the progression or retardation of varicus diseases.

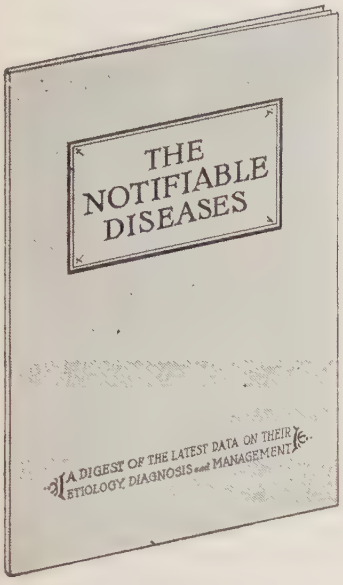
In spite of the recent statistics showing that cancer is increasing the investigator doubts whether these figures show the the actual progress of the dreaded disease. He said that the figures show an increase merely because more people are becoming aware of its existence and submitting to an examination.

The various environmental peculiarities of different races favor certain diseases, he continued. The people of the Orient do not suffer from high blood pressure as the people of the western countries. This is probably due to the fact that they are vegetarians, he said.

Peculiarly, goiter, a swelling of the neck, is prevalent in Switzerland and in the vicinity of the Great Lakes in the United States. The pathologist said this was probably due to the paucity of iodine and other necessary minerals in the drinking waters.

In India the people have a peculiar kind of cancer which affects the abdomen. He attributed this to the custom of carrying a basket of smoking charcoal under the toga to keep warm. This is analogous to the "chimney sweep cancer" which was prevalent in England at one time among the chimney sweeps.

The Notifiable Diseases



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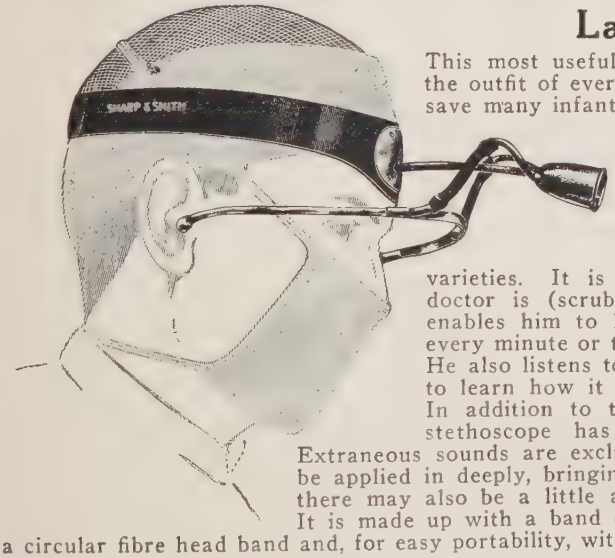

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A Manual of Clinical Laboratory Methods. By Clyde Lottridge Cummer, Ph.B., M.D., Associate Professor of Clinical Pathology, School of Medicine, Western Reserve University; Visiting Dermatologist, St. Alexis Hospital, and St. Vincent's Hospital, Cleveland, Ohio. Second edition, thoroughly revised. Illustrated with 169 engravings and 12 plates. Lea & Febiger, Philadelphia. Price, $6.50.

This is a most excellent book and one we can most heartily recommend to all students, general practitioners, and laboratory technicians. It is written by an authority, one who has his subject well in hand, written in the most clear and easily understood manner, well illustrated and absolutely up to date. A great many additions and changes have been made in this second edition. Certain sections like the one dealing with the Wassermann test have been entirely rewritten. Changes will be found also in the chemical examination of the blood, urinary pigments, parasites, etc. We have practically enumerated all the changes and additions made. It covers the entire subject, as stated, in a clear, concise manner, and we know of no better manual than Cummer's and recommend it accordingly to our readers.

Buchanan's Text - Book of Forensic Medicine and Toxicology. Ninth edition, revised and enlarged. By John E. W. MacFall, M.D., D.P.H. (Liverpool); M.B., Ch.B. (Vict.); Ph.C. Professor in Forensic Medicine and Toxicology, University of Liverpool Bridewell surgeon, Liverpool Police Honorary Adviser to the Criminal Investigation Department, Liverpool and Birkenhead Police Late Demonstrator in Toxicology, Liverpool University; and Lecturer in Botany, Zoology, and Hygiene, Birkenhead and Liverpool Technical Schools; Hon. Major, R.A.M.C. William Wood & Co. Price, $5.00.

The ninth edition of this excellent textbook on forensic medicine and toxicology is edited by Professor John E. W. MacFall of the University of Liverpool. It is, without doubt, one of the best books on the subject with which we are acquainted, very complete, though concise, very clear in its teachings and especially well arranged for the reader. So much can be learned without loss of time. It covers the subject of forensic medicine and toxicology, therefore, in a most admirable manner.

The book is well illustrated, well printed, well arranged, and it can be recommended in every way to the student or practitioner of medicine. That a ninth edition should be called for also testifies to its popularity in England as well as in this country. It would be desirable if an American editor could make a few notations as to the legal method of procedure over here compared with abroad as there are some changes as regards legal forms, etc. Of course, this does not apply to the section on toxicology.

Recent Advances in Obstetrics and Gynaecology. By Aleck W. Bourne, B.A., M.B., B.Ch. (Camb.), F.R.C.S. (Eng.). Obstetric Surgeon to Out-Patients, St. Mary's Hospital; Senior Obstetric Surgeon, Queen Charlotte's

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Hospital; Surgeon to Out-Patients, Samaritan Hospital for Women; Gynaecologist to the Willesden General Hospital; Examiner to the Society of Apothecaries, and Central Midwives' Board. With 58 illustrations. P. Blakiston's Son & Co., Philadelphia. Price, $3.50.

This is an admirable work by a distinguished authority and gives the advances both in obstetrics and gynaecology up to date. It must not be confounded with a text-book on the subject, being merely recent investigations and improvements which commend themselves to both the practicing gynaecologist and the obstetrician. The author lays special stress on the anti-natal care in which he mentions several interesting facts. Other chapters are a review of maternal mortality, the causes of fetal death, remarks on ante-partum hemorrhage, Cesarean section and puerperal sepsis.

In the section on gynaecology special attention has been paid to the use of the X-ray, electro therapeutics, and radium in the treatment of carcinoma of the cervix, with an especially interesting chapter on the general progress of gynaecology.

Insulin, Its Use in the Treatment of Diabetes. Part I. Physiology by J. J. R. Macleod. Part II. Clinical Section by W. R. Campbell. Departments of Medicine and Physiotherapy, University of Toronto. The Williams & Wilkins Co. Baltimore, Md. Price, $4.00.

This book is one of a series of medical monographs which recently appeared in "Medicine," a quarterly edited by various professors of Johns Hopkins School or Hospital. This monograph, then, treats of Insulin and its use in diabetes.

Part one, on physiology, is written by the distinguished J. J. R. Macleod, and part two, the clinical section, by W. R. Campbell, both of the department of medicine and physiotherapy of the University of Toronto.

It is true, as the authors claim, Insulin has proved to be of inestimable value in the treatment of diabetes. No other preparation in recent years has had such wonderful results in the treatment of diabetes as Insulin. This volume, then, reports everything related to Insulin in diabetes up to date and treats of the methods of preparation of Insulin, observation on dogs, normal and hyperglycemic animals, etc., whereas the clinical section treats of the effect of Insulin on metabolism, the diagnosis, dietetic treatment and Insulin treatment of diabetes, with receipts, tables, food equivalents, and food analyses, etc. It is a splendid work, and the book has our unqualified endorsement.

Lactobacillus Acidophilus. By Nicholas Kopeloff, Ph.D., Associate in Bacteriology, Psychiatric Institute, Ward's Island, N. Y. The Williams & Wilkins Co., Baltimore, Md. Price, $5.00.

Sour milk therapy has made rapid strides in the last few years, especially the lactobacillus acidophilus. And you can see these words now on the bill of fare of all the better clubs. The layman even attempts to give the doctor a vast amount of information on this subject. The author of this book claims that the clinical results obtained have lacked definition, and the object of this book is to reduce clinical observations to quantitative terms. The author has well accomplished this in the work before us, and those who are interested in the subject at all will find a vast amount of interesting material to enable them to engage in lactobacillus therapy with certainty and intelligence. We, therefore, cordially recommend this book.

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THE X-RAY IN EMBRYOLOGY AND OBSTETRICS. By W. A. Newman Dorland, A.M., M. D., F. A. C. S., Professor of Gynecology and Obstetrics and Head of the Department of Obstetrics in the Post-graduate Medical School of Chicago; Author of "The American Illustrated Medical Dictionary"; Lieutenant Colonel in the Medical Reserve Corps, U. S. Army, etc., etc. and Maximilian John Hubeny, M.D., F.A.C.R., F.A.C.P., Editor of Radiology; Director of the Department of Radiology of the Physicians and Surgeons Institution; Consulting Radiologist to the Grant, Henrotin, and Polyclinic Hospitals of Chicago; Past Consulting Radiologist to Cook County Hospital, etc. Bruce Publishing Company, Saint Paul, Minn. Price, $10.00.

We are glad to see a new book by our esteemed friend, Professor W. A. Newman Dorland, the well known author of Dorland's Medical Dictionary, etc., ably assisted by Maximilian John Hubeny, the editor of "Radiology." This book, indeed, gives a complete rendition of the radiography of embryology and obstetrics. The book is beautifully illustrated with very numerous X-ray pictures and other illustrations and will give the profession an entirely new insight into this very important and very much neglected subject.

We congratulate the authors on the splendid work they have given to the profession and trust that there will be a widespread and generous appreciation of their tremendous labor in producing this superexcellent work.

BETTERMAN II ON THE BUSINESS OF MEDICINE. By Charles Elton Blanchard, M.D. Author, "The Letters of Dr. Betterman," "An Epitome of Ambulant Proctology," etc., etc. Medical Success Press, Youngstown, Ohio.

This book is dedicated to the "nearly extinct species, the old American family doctor whose work and character I have tried to depict." It is quite a readable book and well worth while reading, containing many interesting anecdotes, showing up a lot of medical fads and fancies, and it is also intended to teach the practicing physician how to increase his revenue.

While we do not agree with all the doctor has to suggest, still there is so much of interest in the book that no one will regret the time spent in reading it.

SIXTY YEARS IN MEDICAL HARNESS, OR THE STORY OF A LONG MEDICAL LIFE, 1865-1925. By Charles Beneulyn Johnson, M.D., Author of Muskets and Medicine, Medicine in Champaign County, Illinois in the Fifties, etc. New York Medical Life Press. Price, $3.00.

Here is another book dedicated to the ever serviceable but now vanishing member of the medical profession, the old-time family doctor. This book is really of great interest, covering particularly early practice in the state of Illinois and giving many pleasant glances at the giants of former days like William H. Byford, Moses Gunn, N. S. Davis, James S. Jewell, J. H. Hollister and many others of special interest to the reviewer who has known all of them. The nature of this book is quite different from Blanchard's book, having nothing to do specially with the economic conditions, but just the story of a general practice from 1865 up to date. And we hope this book will have a wide circulation as it is really well worth while.

YOUNG'S PRACTICE OF UROLOGY. BASED ON A STUDY OF 12,500 CASES. By Hugh H. Young, M.D., and David M. Davis, M.D., Johns Hopkins University. With the collaboration of Franklin P. Johnson. Two octavo volumes totalling

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1,484 pages with 1,003 illustrations, 20 being color plates, by William P. Didusch. Philadelphia and London: W. B. Saunders Company, 1926. Per set: Cloth, $25.00 net.

"Young's Practice of Urology" is a magnificent work, as can easily be expected by the standing of the distinguished author. It is a monumental work, a classical work of the highest order and really beyond criticism. It will find a place in the library of every urologist, every surgeon, and most progressive physicians. This present work is based on a study of 12,500 cases, and as the author states, before beginning a critical study of these records it became necessary to prepare elaborate indices and to send out questionnaires and requests to report in person to thousands of patients. The clinical researches required to digest the information amassed have been staggering, but with the help of very willing assistants the work has gone on until almost all of the important subjects have been analytically studied in the light of our collected histories as well as from the facts gleaned in the formidable literature.

The whole subject matter, then, has almost entirely as its basis, pathology, based on original researches, etc. Much space and study has been given to acute and chronic cystitis, pyonephrosis and general peritonitis due to the gonococcus, renal calculus due to the bacillus typhosus, stricture of the ureter due to siminal vesiculitis, the symptom complex in calculus of the lower end of the ureter, vesical diverticula containing cancer, a proven case of lateral hermaphroditism, etc.

Special attention has also been paid to operative procedures of which space permits us to mention only a few, like a special Bottini technique for middle lobe cases, conservative perineal prostatectomy, a radical operation for carcinoma of the prostate, a plastic operation on urethral and vesical sphincters for the cure of incontinence, intravesical diverticulectomy, heminephrectomy in double kidney with calculus, etc. Also special descriptions have been given of urologic instruments devised by the author such as a Bottini cautery incisor with interchangeable blades, the prostatic tractor, the cystoscopic rongeur, the prostatic bar excisor, or punch, the evacuating cystoscopic lithotrite, a special kidney elevator, an automatic bladder irrigator, and many other most valuable instruments. The work is beautifully illustrated, with over a thousand original illustrations and many color plates by Mr. Didusch, a distinguished artist.

Volume one treats of urogenital infections and infestations, general, tubercular, syphilitic, etc.; urolithiasis, benign hypertrophy of the prostate and the various neoplasms of the urogenital tract.

Volume two treats principally of the various operations on the kidney, ureter, bladder, prostate, etc., etc. The author has been most generous in giving due credit to his various assistants and internes. And finally, we again, without hesitation, recommend this work as the very best on urology to date. No one at all interested in the subject can afford to be without a copy of this superexcellent work.

Whichever side of whatever question a respectable man gets on he always finds some people there that he wishes were on the other side.—*Ohio State Journal.*

Sophistication is just the realization that the stock exchange isn't anything like Santa Claus.—*Associated Editors.*

When a man says "I run things at my house," he may mean the washing-machine and the furnace.—*Columbia Record.*

The man who doesn't believe that women are hard losers never knew one who was trying to reduce.—*Arkansas Gazette.*

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WE make several styles of portable illuminated electric fountains for the home and office. The clear sparkling water falling on the artistic illuminated shade makes a beautiful decoration for sun-parlors or living-rooms. They are portable and can be moved to any room as they do not require any water connection. The top container can be lifted off this two-piece stand for table use. The beautiful art glass splash ring reflects the light. Our Jewel Fountain is an excellent humidifier and it cools the atmosphere in Summer. Its artistic beauty will make it a joy forever in your home. An ideal Xmas gift.

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Anaesthetic, reducing Antiphlogistically and Antiseptic

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After an absence of seven years from the American market, due to war conditions this *valuable product* is again obtainable.

Literature and samples mailed on request

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a medical product is an absolute essential on the part of the physician if the product is to gain ultimate success.

PLUTO WATER

has, through years of faithful service, demonstrated to the members of the medical profession that their belief in its effectiveness and efficiency as a remedy in constipation and its attendant evils

IS JUSTIFIED

Many practitioners direct convalescent patients to the spring for rest and complete treatment.

Sample and literature to the medical profession on request to the

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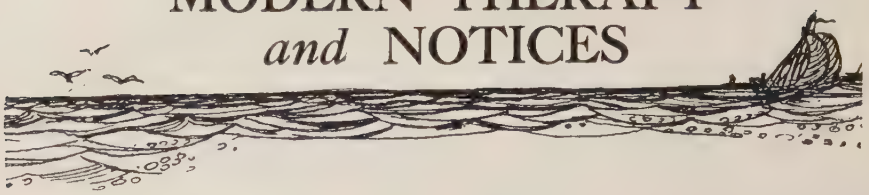
MODERN THERAPY *and* NOTICES



HAVE YOU A NIGHT CAP?

If you are looking for a "night cap" which will bring good cheer and an invigorating sense of physical well-being after a tiring day, try a glass of Horlick's, the Original Malted Milk. A glassful, taken hot upon retiring, is remarkably conducive to sound, restful sleep. Its regular use at bedtime has also proven very effective in cases of insomnia and neurasthenia. It is well that every physician should know its real goodness, useful both for the tired doctor and for the nervous or malnourished patient.

MODERN TREATMENT FOR IVY POISONING

Nature calls to field, forest and stream —out to "the great open spaces," as they say in the movies.

But, alas, for many, the pleasant day in the country is paid for dearly by suffering the effects of ivy poisoning and, until recently, there seemed to be no safe or dependable treatment for the relief of these most annoying and distressing symptoms.

Now, however, there is available a product which has given most encouraging results in the prophylaxis and treatment of ivy poisoning. IVYOL is the name of this product. It is prepared by a method originated and perfected in the Mulford Laboratories.

IVYOL is a purified extract of the active principle of Rhus toxicodendron, relatively free from chlorophyll, tannin, gums and resins.

Among the important features of IVYOL is the fact that sterile olive oil is used as a vehicle for the poison ivy extract. In earlier products, when alcoholic extracts were administered, they would cause great irritation and pain to the patient. By using IVYOL, with its olive oil base, this objection is almost entirely overcome, and there is practically no pain or inconvenience for the patient —a very marked advantage.

With the increasing tendency among our population toward camp life, touring and spending more and more time out of doors, the number of cases of ivy poisoning has been growing rather rapidly during the past few years.

Physicians and druggists will, therefore, appreciate the need for a product of this character. Literature and further information regarding same may be obtained by writing to H. K. Mulford Company, Mulford Building, Philadelphia, Pa., and mentioning this journal.

CHRONIC CYSTITIS

There is scarcely a day goes by that I do not prescribe SANMETTO — Od Chemical Co. I am especially elated with the results obtained in chronic cystitis and urethritis in a man sixty years of age. In this case there was ammoniacal decomposition of the urine, great irritation of the bladder and urethra with frequent micturitions, having to get up four or five times nightly. This man was greatly emaciated and in a highly nervous condition. I put him on SANMETTO (OD), one teaspoonful three times daily, and irrigated the bladder once a day. This case coming from out of the city had expected to remain with me for at least three months; but at the end of six weeks, under the above treatment, all signs and

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The only permanent cure known for superfluous hair, moles, warts, etc. I Positively Guarantee My Work to be Permanent. No Pains or Scars. I use Multiple Electrolysis (many needles), the quickest, cheapest and most reliable of all electric needle methods. Special attention to cases referred to me by physicians.

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Use NEET—A bland cream that removes hair without irritating the skin.

In favor with many of the medical profession for depilating in preparation for delivery. Especially valuable if patient insists on home confinement.

Useful in preparation for all abdominal operations or operations on the pubic region.

Indicated where simple ulcers on vulva make shaving difficult and painful.

Relieves patient of the discomfort and risk attending the use of a razor.

Incoming growth is slower to reach the surface than if shaved, and is softer and finer than growth following the use of a razor.

A full size trial tube with complete instructions for use will be mailed without charge to any physician requesting it.

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SANMETTO

IN GENITO-URINARY DISEASES

Od Chem. Co. 59-61 BARROW NEW YORK

SAMPLES TO PHYSICIANS ONLY

symptoms of genito-urinary irritation having disappeared and the patient having gained fifteen pounds in weight, he was allowed to go home. He was, however, kept on SANMETTO, one teaspoonful three times daily, for an additional three months and at this date, one year after beginning treatment, is in good condition. I am using SANMETTO in all my acute and chronic cases of urethirtis, specific or non-specific, with good results.—J. F., M.D.

TONGALINE

Tongaline has been most successfully prescribed for the influenza, because it promptly and thoroughly eliminates the poisonous secretions through the various emunctories of the system, thus restoring the diseased organs to their normal functions.

As it is necessary to render the blood stream antiseptic, the use of the salicylates is highly recommended, therefore. Tongaline can be relied upon as a most effective agent, particularly in preventing the sequelae of influenza, always serious, and frequently dangerous.

MORE THAN A LAXATIVE

Probably no therapeutic preparation in recent years has received the stamp of professional approval to the extent that Agarol has. The reason for this can unquestionably be found in the rational appeal of its composition and the fact that it has proven itself capable not alone of clearing out the bowel thoroughly and well, without griping or distress, but of restoring the "inherent" or physiologic powers of the colon to a point where it can perform its natural functions without artificial aid.

A consideration of the make-up of Agarol and its manner of action, which Lawton has shown is "along physiologic channels," can leave no doubt of its ability to produce regular bowel movements, and by thus exercising the lazy or sluggish muscles, to gradually restore their inherent capacity to function properly without further aid. Agarol, therefore, is more than a laxative and catheratic—it is a true bowel tonic and corrective.

They'll Have a Rest.—A scientist has perfected a machine that cures insomnia. This should put thousands of sheep out of work.—*Life.*

Polly's One Weakness—Lady—"Does that parrot swear?"

Sailor—"A little, but he never drinks or gambles."—*Philadelphia Bulletin.*

Released from the Strain.—"Who is the very slangy chap you were just talking to?" "He's a teacher of English enjoying a day off."—*Boston Transcript.*

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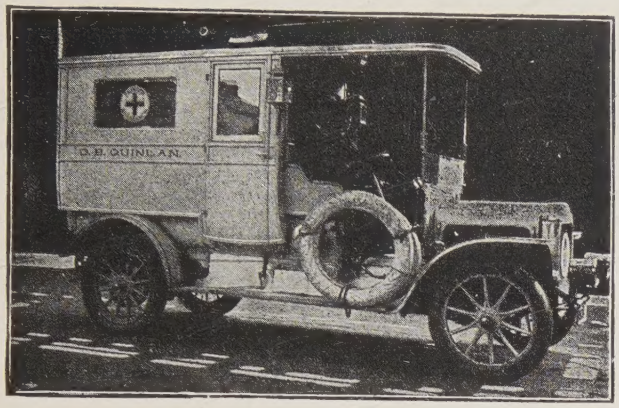

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"Superior to other bromide preparations"

"After clinical tests I have found **Peacock's Bromides** superior to any other bromide preparation on the market, both in its immediate action and its after effects. No matter how long or continuously I have given it, it has never upset the digestion, or produced bromism."

—M. D., New York City.

DOSE: *One to three teaspoonfuls p. r. n.*

"When the liver is inactive"

"For many years I have relied on **Chionia** as my favorite cholagogue. I know of no other remedy that gives more prompt and uniformly satisfactory results when the liver is inactive or congested. It increases the flow of bile without cathartic action."

—M. D., New York City.

DOSE: *One to two teaspoonfuls t. i. d.*

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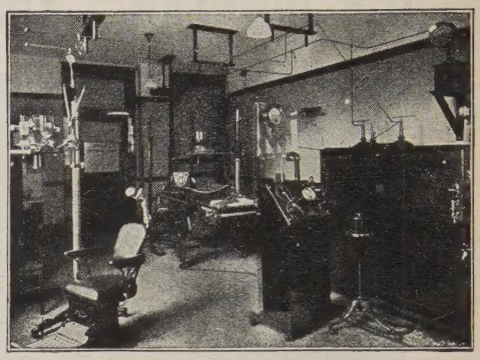
Department of Pathology, Bacteriology and Serology



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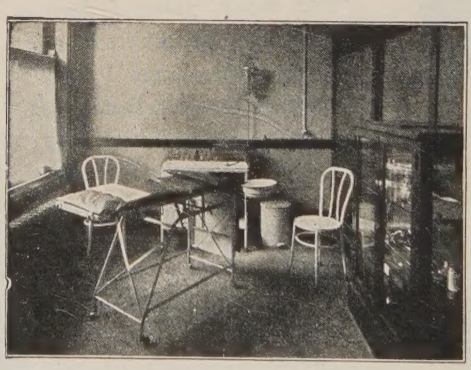

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